N O T I C E

NO HAND CARRIED BIDS!
NO MAILED BIDS!

Current security requirements established by the U.S. Capitol Police to screen mail being delivered to the U.S. Capitol Complex of buildings preclude the use of U.S. Postal Service by offerors to deliver their proposals submitted in response to this solicitation. In addition, because all packages must be screened for security purposes at a central location prior to their delivery, the Architect of the Capitol cannot accept packages containing offers handcarried directly to the Bid Room address within the Ford House Office Building, as specified elsewhere in this solicitation, or at any other location in the U.S. Capitol Complex of buildings.

Due to these unusual circumstances the Procurement Division for the Architect of the Capitol will only accept offers/proposals via UPS or FEDEX at the address noted below. All handcarried offers/proposals will be rejected. Any attempt to hand carry an offer/proposal to any location in the U.S. Capitol Complex of buildings will be refused. See Section L for submission of offers. Offerors are advised when sending proposals via FEDEX or UPS ***not*** to use same day delivery. FEDEX/UPS often subcontract out the delivery for same-day service. It is necessary for delivery personnel to arrive in a FEDEX/UPS truck and be in a uniform recognized as FEDEX/UPS at the delivery point. Offerors are encouraged to determine who will be making the delivery when making arrangements with FEDEX/UPS.

All UPS and FEDEX deliveries are to be made to the Ford House Office Building at the following address:

Architect of the Capitol
Procurement Division
Ford House Office Building
Attn: Chris Lindsay
Room H2-263
Second and “D” Streets, S.W.
Washington, DC 20515

SOLICITATION, OFFER, AND AWARD Architect of the Capitol	1. REQUISITION NO. PP 080048	2. PROJECT NO.

3. CONTRACT NUMBER	4. SOLICITATION NUMBER	5. TYPE OF SOLICITATION	6. TITLE: O&M OF UTITLITY DISTRIBUTION SYSTEM
	RFP080016	☐ SEALED BID (IFB) ☒ NEGOTIATED (RFP)	7. DATE ISSUED: 04/23/2008

8. ISSUED BY	9. ADDRESS OFFER TO (If other than Item 8)
AOC - Procurement Division 2nd & D Streets, SW Room H2-263 WASHINGTON, DC 20515	AOC - Procurement Division 2nd & D Streets, SW Room H2-263 WASHINGTON, DC 20515

NOTE: In sealed bid solicitations "offer" and "offeror" mean "bid" and "bidder".

SOLICITATION

10. Sealed offers in original and _____3_____ copies for furnishing the supplies or services in the Schedule will be received at the place specified in item 9 on 06/24/2008 at 13:00:00 (local time).

CAUTION - LATE Submissions, Modifications, and Withdrawals: All offers are subject to all terms and conditions contained in this solicitation.

11. FOR INFORMATION CALL: Christian Lindsay TELEPHONE NO.(NO COLLECT CALLS) 202-226-0994

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OFFER (Must be fully completed by offeror)

NOTE: Item 13 does not apply if the solicitation includes the provisionstitled Minimum Bid Acceptance Period.

13. In compliance with the above, the undersigned agrees, if this offer is accepted within _____ CALENDAR days *(60 CALENDAR days unless a different period is inserted by the offeror)* from the date for receipt of offers specified above, to furnish any or all items upon which prices are offered at the price set opposite each item, delivered at the designated point(s), within the time specified in the schedule.

14. DISCOUNT FOR PROMPT PAYMENT	10 CALENDAR DAYS(%)	20 CALENDAR DAYS(%)	30 CALENDAR DAYS(%)	CALENDAR DAYS(%)

15. ACKNOWLEDGEMENT OF AMENDMENTS *(The offeror acknowledges receipt of amendments to the SOLICITATION for offerors and related documents numbered and dated):*	AMENDMENT NO.	DATE	AMENDMENT NO.	DATE

16A. NAME AND ADDRESS OF OFFEROR	CODE	17. NAME AND TITLE OF PERSON AUTHORIZED TO SIGN OFFER *(Type or Print)*

16B. TELEPHONE NUMBER			16C. CHECK IF REMITTANCE ADDRESS IS DIFFERENT FROM ABOVE - ENTER SUCH ADDRESS IN	18. SIGNATURE	19. OFFER DATE
AREA CODE	NUMBER	EXT.	☐		

AWARD (To be completed by Government)

20. AUTHORITY FOR USING OTHER THAN FULL AND OPEN COMPETITION:	21. ACCEPTED AS TO ITEMS NUMBERED	22. SUBMIT INVOICES VIA FAX FOR PAYMENT TO:	23. AMOUNT

24. NAME OF CONTRACTING OFFICER (Type or print)	25. UNITED STATES OF AMERICA	26. AWARD DATE
Christian Lindsay	BY_____ (Signature of the Contracting Officer)	

Section B - Supplies or Services and Prices/Costs

BASE

Number	Commodity Name	Quantity	Unit of Issue	Unit Price ($)	Total Cost ($, Inc. disc)
1	BASE YEAR 2008 - TOTAL PRICE FOR LABOR CATEGORIES (1 LT)	Total : 0.00	LT	$	$
	Description:				
2	BASE YEAR 2008 - TOTAL FOR PRICE BASIS INSPECTION TOURS (12 MO)	Total : 0.00	LT	$	$
	Description:				
3	OPTION YEAR 1 - 2009 TOTAL PRICE FOR LABOR CATEGORIES (1 LT)	Total : 0.00	LT	$	$
	Description:				
4	OPTION YEAR 1 - 2009 TOTAL FOR PRICE BASIC INSPECTION TOUR (12 MO)	Total : 0.00	LT	$	$
	Description:				
5	OPTION YEAR 2 - 2010 TOTAL PRICE FOR LABOR CATEGORIES (1 LT)	Total : 0.00	LT	$	$
	Description:				
6	OPTION YEAR 2 - 2010 TOTAL FOR PRICE BASIC INSPECTION TOUR (12 MO)	Total : 0.00	LT	$	$
	Description:				
7	OPTION YEAR 3 - 2011 TOTAL PRICE FOR LABOR CATEGORIES (1 LT)	Total : 0.00	LT	$	$
	Description:				
8	OPTION YEAR 3 - 2011 TOTAL FOR PRICE BASIC INSPECTION TOUR (12 MO)	Total : 0.00	LT	$	$
	Description:				
9	OPTION YEAR 4 - 2012 TOTAL PRICE FOR LABOR CATEGORIES (1 LT)	Total : 0.00	LT	$	$

	Description:				
10	OPTION YEAR 4 - 2012 TOTAL FOR PRICE BASIC INSPECTION TOUR (12 MO)	Total : 0.00	LT	$	$
	Description:				

Lump-Sum Price for Base	$

B.1

PLEASE SEE ATTACHMENT NO. J.9 FOR LABOR CATEGORIES AND UNIT PRICES. PLEASE FILL IN TOTALS ON THE LINE ITEMS ABOVE, AND RETURN THE COMPLETE ATTACHMENT J.9 (ALL PAGES) WITH YOUR PROPOSAL.

Section C - Description/Specifications/Statement of Work

C.1

SECTION C

DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

C.1 BACKGROUND

C.1.1 The Utility Distribution System consists of all steam supply piping, condensate return piping, chilled water supply & return piping, and related mechanical, electrical, and structural equipment located outside of the Capitol Power Plant (CPP) operated by the AOC. This includes all tunnels, vaults, manholes, sumps, and building steam stations associated with the distribution system. The Utility Distribution System is considered a Permit Confined Space by AOC and has limited egress. All work shall be performed in accordance with the Capitol Power Plant's (CPP) Utility Distribution system Access Control Policy (Attachment J.6). Please note that this policy requires that all individuals who are performing work within the tunnels have specific training and that evidence of completion of the training is submitted. Note that in accordance with this policy, decontamination points have been established at various locations. If the Contractor's work plan requires different entry/egress points, the Contractor(s) shall submit the proposed locations and decontamination procedures for approval. **A SITE VISIT WILL BE VERY IMPORTANT FOR OFFERORS TO ATTEND. AFTER THE ORIGINAL SITE VISIT IS HELD, A SECOND SITE VISIT WILL BE PROVIDED BY APPOINTMENT ONLY TO INSPECT THE UTILITY DISTRIBUTION SYSTEMS CONDITIONS, PROVIDED THAT ALL CONTRACTORS HAVE PROPER TRAINING. (See Attachment J.6 for proper training).**

C.1.2 The steam distribution tunnels and manholes are typically hot, damp, and dark. The temperature within sections of the Tunnels may exceed 130 degrees F. The tunnels contain steam piping which will remain in operation during the performance of work The tunnels and manholes are considered to be permit-required confined spaces. Some of the piping and equipment in the tunnels and manholes are insulated with asbestos-containing materials (ACM). The Contractor must inform his/her employees and subcontractors of the working conditions and the possible safety implications. The Contractor shall provide proper ventilation, cooling, electric power, and lighting in the tunnels and manholes as necessary. The Contractor shall provide his/her employees and subcontractors with all safety equipment necessary to comply with the AOC s safety entry requirements. The Contractor shall provide a 4-gas air monitor for each work crew. The AOC shall provide two, two-way radios to each contractor work crew for communication purposes within the tunnels and with AOC personnel. The Contractor shall ensure that his employees and subcontractors follow all OSHA and AOC regulations for the work environment, and the Contractor shall ensure sound engineering methods in the repairs of these areas. No person shall enter the tunnel system alone; entries will only be authorized when at least two individuals are entering the space. No eating or smoking is allowed in the tunnel system.

C.1.3 The contractor will provide all tools, labor and equipment to complete work under this contract.

C.2 SCOPE AND DESCRIPTION OF WORK

C.2.1 Tours, Inspections, Basic Operation, & Preventative Maintenance: This work is to be performed under the Basic Scope of Work. The Contractor shall tour and inspect all portions of the Utility Distribution System and perform required preventative maintenance within the Utility Distribution System. The Contractor shall also provide basic operation of equipment throughout the Utility Distribution System as needed to perform minor maintenance tasks. Note that the operation of equipment will be only as related to maintenance inspection and

repair. The contractor will perform operations such as isolation of distribution sections or change of season will be under direction of the AOC.

C.2.1.1 Schedule: The Utility Distribution System is divided into separate tunnels and manholes. All portions of the Utility Distribution System shall be toured and inspected once per week. The Contractor will document inspection rates and track man-hours necessary to complete the inspection of all portions of the Utility Distribution System. Should the AOC redirect the contractor to perform operations, maintenance or other efforts in excess of the available man-hours required to complete the required inspections with the current level of staffing the contractor shall inform the AOC of the sections of the distribution system that will not be inspected due to the AOC redirection of effort. The contractor will also provide the AOC with a task order proposal for additional personnel required to perform the required inspections for the week.

C.2.1.2 Tours and Inspections: The Contractor shall tour and inspect all portions of the Utility Distribution System. AOC shall provide the Contractor with draft inspection sheets to initiate inspections. As the Contractor becomes more familiar with the facility, the Contractor and/or AOC shall revise the inspection sheets accordingly. Any proposed inspection sheet revision must be approved by the COTR. Any deficiencies shall be noted and scheduled for repair or replacement (see Item 4 below). This at a minimum this will include the following:

a. Piping and Fittings: Includes inspections for leaks.
b. Mechanical Systems: Includes inspection of expansion joints, valves, traps, sump pumps, and exhaust fans. Trap stations shall be tested to ensure proper operation.
c. Manholes, Tunnel Access Grates, Ladders, Covers, Locks, Etc.: Includes inspection, removal of water from vaults and cleaning of trash and debris. Manholes shall have the water pumped from them as necessary to prevent the accumulation of water. This shall be done after every rainfall. Storm water will be tested for pH and verified to have no visible sheen prior to removal from the manhole. In the event that the pH is above or below permissible limits allowed by Federal and District regulations or has a visible oil sheen, the contractor will notify the AOC immediately.
d. Electrical Systems: Includes inspection of all components, including temperature and sump alarms.
e. Insulation for Pipes, Valves, and Equipment: Includes inspection for wet, damaged, or missing insulation.
f. Pipe and Equipment Supports: Includes inspection for structural integrity and attachments. Initial inspections will constitute a baseline survey and following inspections will focus on changes from this baseline.
g. Concrete Walls, Floors, Ceilings, and Pedestals: Includes inspection for cracks, spalling, and other deterioration. Initial inspections will constitute a baseline survey and following inspections will focus on changes from this baseline.

C.2.1.3 Basic Preventative Maintenance: The Contractor shall perform preventative maintenance on equipment in accordance with the manufacturer s recommendations and the recommended best practices of the industry **(See Attachment J.6 Preventative Maintenance Checklists)**. Equipment under warranty shall be maintained in accordance with warranty instructions and conditions. AOC checklists **(See Attachment J.7 Replacement Equipment and Material Specifications)** are provided as a minimum maintenance standard. On a monthly basis, the Contractor shall submit a proposed maintenance task schedule to the COTR for review and approval. The task schedule will include the proposed schedule for both inspection and PM services. Upon approval, the Contractor shall schedule the workforce accordingly. Any item of equipment found to be non-functional or in a degraded condition that cannot be made functional by the normal preventative maintenance procedures at the time of the inspection, shall be noted for repair or replacement. The types of equipment and activities included in this task include:

a. Valves: Includes inspection, cleaning, exercising (turning the handle a few turns in each direction), lubrication, tightening or replacement of packing, and replacement of seals and disks. Where valve is electrically or pneumatically operated, check, lubricate, and adjust actuator.
b. Expansion Joints: Includes inspection, cleaning, lubrication, and packing or re-packing.
c. Steam Traps: Includes inspection, cleaning, and replacement of worn bellows, diaphragms, linkages, and gaskets. Also includes inspection and maintenance of associated strainer (open blow-down valve and unclog if

necessary) high side and low side isolation valves, test valve, and check valve. All traps shall be fully operational upon completion of the preventative maintenance, or the deficiencies noted and scheduled for repair or replacement.
d. Fans: Includes inspection, cleaning, lubrication of bearings, and checking belts. The motor, electrical connections, and associated equipment (including structural members, guards, fan blades, and motor starters) shall be inspected to ensure that they are in proper working order. All equipment shall be fully operational upon completion of the preventative maintenance, or the deficiencies noted and scheduled for repair or replacement.
e. Sumps and Pumps: Includes inspection, cleaning, lubrication, and operational check, including associated floats, alternators, and linkages. The motor, electrical connections, and associated equipment (including structural members and motor starters) shall be inspected and scheduled for repair or replacement if deficient. All sump pits shall be cleaned of all debris, and discharge lines from the sump pit to the storm drain or sewer cleaned out.
f. Lighting: Includes inspection, cleaning, continuous replacement of lamps, lenses, and guards.
g. Motor Starters For Sumps and Fans: Includes tightening wiring connections, testing, and cleaning.
h. Motors: Includes inspection, cleaning, and lubrication of bearings.
i. Panelboards, Pedestals, Disconnect Switches, Junction Boxes (including electrical and security system), and Low-voltage Circuit Breakers: Includes tightening wiring connections, testing, lubricating, cleaning, and securing covers or access doors. Replace covers and screws as necessary. (Note that security system panelboards shall be inspected to ensure that covers and access doors are in place. This is a visual inspection of the panelboard only, the contractor will not open or otherwise disturb security system panels for inspection.)
j. Drainage Trench: Clean to ensure proper water flow.
l. Other: Minor repairs and replacements related to the above items.

C.2.1.4 Maintenance of Records: The Contractor shall be responsible for updating CPP s maintenance records, including paper forms and entries into CPP's computerized maintenance management systems (CMMS), including its primary CMMS (whether this is its present TMA System or successor) AOC will provide training on system utilization as well as any pertinent Microsoft Access databases and Microsoft Excel spreadsheets. This includes recording of all tours and inspections, preventative maintenance, and repair and replacement activities performed by the Contractor. All entries and/or forms related to the Contractor s activities shall be submitted and/or inputted no later than two (2) working days after the action item is identified or the work item is completed. The AOC shall maintain an oversight for quality control/assurance purposes. These records are the basis for the monthly payment. All records must be complete before the monthly payment is approved. (Note: The Contractor is encouraged to suggest alternative systems or approaches to maintaining computerized maintenance records. The AOC will consider alternatives to its current systems and methods if they will be of benefit to the AOC).
C.2.1.5 Correction of Records: Due to the extent of the Utility Distribution System, continuous maintenance, and major and emergency repairs, the Contractor should expect to find minor discrepancies or errors in the CPP equipment inventory and maintenance databases. The Contractor shall notify the CPP of any discrepancies between CPP s equipment inventory and conditions encountered in the field, and assist the CPP in correcting this information.
C.2.1.6 Basic Operation: Under the direction of the AOC, the Contractor shall be responsible for providing assistance in the basic operation of equipment in the Utility Distribution System. Once familiar with the system, the Contractor will be responsible for performing minor operations mainly while performing the preventative maintenance, repairs, or replacement of equipment on the steam trap stations.
C.2.2 Asbestos removal may be required as part of certain task orders where the preventative or corrective maintenance to be performed require removing or otherwise disturbing ACM. Asbestos abatement will follow the general requirements as outlined in Appendixes A and B (AOC Asbestos Policy and AOC Guide Asbestos Removal Specification). Task orders will be issued using either Standard Maintenance Abatement or Project Maintenance Abatement as outlined below:
C.2.2.1 Standard Maintenance Abatement will be performed using the general maintenance notification for the Capitol Power Plant, submitted on an annual basis. The work shall be performed using glovebags only, and will follow general submittal requirements as outlined in the AOC Asbestos Policy. Abatements performed as Standard Maintenance Abatement will be limited to no more than 20 square feet or 20 linear feet of asbestos

removal.
C.2.2.2 Project Maintenance Contracts will follow the general requirements of the attached guide specification for asbestos abatement. Project maintenance will require the contractor to apply for a separate notification to the District of Columbia.
C.2.2.3 All abatement projects will be performed on individual task orders.
C.2.3 Capitol Power Plant Support Work: In addition to repair work to be performed in the Utility Distribution System, the contractor may be required to perform work within the US Capitol Power Plant. All labor trades and rates listed in the scope of work will be available for work within the US Capitol Power Plant as negotiated on an individual task order basis.
C.3 GENERAL REQUIREMENTS

C.3.l Contractor Appearance: The Contractor s on-site employees shall present a neat appearance and wear a uniform that clearly identifies the company and employees full name attached in a permanent or semi-permanent manner, such as a badge or monogram. In addition all personnel shall be required to display identification on their person at all times as required by the United States Government.

C.3.2 Qualifications: All personnel assigned to perform work at the CPP shall be qualified and licensed by the Maryland State Board of Occupational Regulation or provide an equivalent State or Federal license. A copy of the professional license for each tradesman assigned to the contract shall be provided to the Government within 20 day after the contract award date. Individual subcontractors employed by the prime contractor to perform work at the CPP shall provide a copy of their professional licence to the Government before beginning work at the facility. These positions shall include:

a. Licensed Journeyman Electrician

b. Licensed Maintenance Mechanic

c. Licensed Journeyman Pipefitter/Welder

d. Mechanical, HVAC: Master

e. Painting: Evidence of experience and qualifications at the Journeyman level or higher.

f. Carpentry: Evidence of experience and qualifications at the Journeyman level or higher.

g. Steel Work: Master

h. Welding: Master

i. Fire Systems: NICET Certified

j. Instrumentation and Controls Technician

3.2.1 It shall be the responsibility of the contractor to insure ensure that all sub-contractors assigned by the contractor to perform work at the facility shall have the qualifications indicated above.

3.2.2 Qualifications for personnel involved in asbestos abatement are outlined in Appendix ???

C.3.3 Access Requirements: It shall be the responsibility of the Contractor to ensure that all personnel (including sub-contractors, and contractors performing warranty work) assigned to perform work at the CPP have obtained, and maintain the necessary security clearances and identification as required by the AOC prior to being assigned to work at the facility. The Contractor shall be responsible for insuring that all sub-contractors and contractors performing warranty work are provided with the necessary escorts, if required, while they are working at the facility.

C.3.3.1 The Contractor will be responsible for insuring that all personnel assigned to perform work at the facility are aware of, and follow, all policies, processes, and procedures governing their activities while working at the CPP.

C.3.4 Industry Standards and Practices: The Contractor is required to operate, inspect, maintain and protect the CPP in a manner consistent with industry standards and practices.

C.3.4.1 General Requirements: The Contractor shall comply with all applicable Occupational Safety and Health Administration (OSHA) requirements so that a safe and healthy environment is maintained for all tenants and visitors.

a. Occupational Safety and Health Standards for General Industry 29 CFR 1910
b. Safety and Health Regulations for Construction 29 CFR 1926.
d. Basic Program Elements for Federal Employee OSHA Program and Matters 29 CFR 1960
e. Uniform Federal Accessibility Standards and Guidelines (UFAS)
f. Federal Standard 313: Preparation and the Submission of Material Safety Data Sheets
g. Building Officials and Code Administrators International, mc, National Building Code (BOCA)as it relates to maintenance incidental to inspection.
h. American Governmental Industrial Hygienists Threshold limit Value for Chemical Substances and Physical Agents and Biological Exposure Indices

C.3.4.2 Indoor Air Quality:

a. American Society of Heating, Refrigerating and Air Conditioning Engineers, Inc. Standards (ASHRAE): Refer to publications and standards listed in Section 2 of the Operations and Maintenance Manual.
b. Ventilation for Acceptable Indoor Air Quality (ASHRAE-62-2001) Standard for Thermal Environmental Conditions for Human Occupancy (ANSIIASHRAE-55) National Environmental Balancing Bureau (NEBB): Practices for Measurement, Testing, Adjusting and Balancing of Building Heating, Ventilation, Air Conditioning and Refrigeration System.

C.3.4.3 Safety, Fire Protection and Accident Investigation

a. National Fire Protection Association (NFPA) Codes and Standards including the Life Safety Code and the National Electrical Code: Refer to codes and standards listed in Section 2 of the Operations and Maintenance Manual.
b. National Safety Council Accident Investigation: A New Approach

C.3.4.4 Other References

a. Environmental Protection Agency (EPA): National Emission Standards for Hazardous Air Pollutants (40 CFR6 1); Hazardous Waste Management (40 CFR 260-270, 302, 355, 370)

C.3.5 Contracting Officer s Technical Representative (COTR). The Contracting Officer (CO) shall designate, at it s discretion, a Contracting Officer s Technical Representative (COTR) to perform contract administration functions.

C.3.6 Contractor Space. Due to the limitations imposed by space restrictions at the CPP, the AOC will only be able to provide the Contractor with very limited work and/or storage space at the facility. Space available shall be limited to a portion of the CPP Tunnel Shop. The Contractor shall work with AOC to identify additional available space for the installation of a single construction trailer. Chemicals or supplies not in immediate use may not be stored in the facility.

C.3.7 Service Subcontracts: Within 30 days after contract award, the Contractor shall provide the COTR and

CO copies of any contracts or subcontracts entered into to provide services covered under this contract.

C.4 CONTRACTOR RESPONSIBILITIES:

C.4.1 The Contractor shall be responsible for developing and executing a Safety Plan to establish protocol for day-to-day operations and response to emergency situations. A copy of the Safety Plan must be presented to the AOC for their review and approval within twenty (20) days of the award of this contract.

C.4.2 Hours of Operation: The Contractor shall be responsible for furnishing the staffing itemized in Section B. The term normal hours of operation are Monday through Friday from 6:00 AM to 2:30 PM.

C.4.2.1 Outside Normal Hours of Operation: The utility service systems in the utility distribution system must be maintained by the AOC at the prescribed set-points at all times, regardless of the day, time, or occupancy of the facility. The Contractor shall within the prescribed time as outlined below to support urgent and emergency issues that occur during Other Than the Normal Hours Of Operation.

C.4.2.2 After Normal Hours Contact: The Contractor shall maintain an after hours call in point of contact that shall be available 24 hours per day / 7 days per week. If multiple parties are to rotate through on-call status, the contractor shall provide a schedule and list of dates for each after hours contact.

C.4.2.3 Federal Holidays: The Contractor shall obtain permission from the COTR before performing work at the facility during federal holidays. The Contractor shall be notified by the COTR of any additional holidays designated by the President of the United States, and or Congress.

C.4.2.4 Early Closures: The Contractor shall be notified by the COTR of any early closings or other unscheduled closings.

C.4.3 Requests For Building Services: The Contractor shall have qualified personnel available during normal working hours to respond to additional requests for service. The Contractor shall provide all supervisory and maintenance personnel with radios provided by the AOC in order to respond to requested services during normal working hours. If the request for service cannot be resolved within the required response time the COTR or designated representative shall be immediately notified, and the contractor will document the reason for the delay and provide the COTR with an anticipated completion date and/or time.

C.4.3.1 The Contractor shall provide the COTR with a Service Request Status and Completion Report, weekly. The report shall be in a log format that includes details of request and completion date.

C.4.3.2 Requests for service initiated outside of normal working hours can be of three types: Emergency, Immediate or Normal. The required response times will vary by type as specified below:

C.4.3.2.1 Routine Requests: The Contractor shall respond promptly to routine requests for services during normal working hours on the next business day. In those instances where a request cannot be responded to on the next business day due to circumstances beyond the Contractor s control, the Contractor shall immediately notify the COR or designated representative with a written extension request which:

a. Explains the reason for the delay.
b. Establishes an estimated time and date for completion.
c. Includes evidence that the Contractor has made all reasonable efforts to complete appropriate adjustments or repairs.

C.4.3.2.2 Immediate Requests: Immediate requests address circumstances that interrupt or otherwise adversely impact either system operations or occupants, regardless of whether the request is made during normal working hours, after normal working hours, holidays, and weekends. The Contractor shall respond within twenty-four

(24) hours and remain on the job until the problem has been resolved. Examples of these types of service calls include, but are not limited to, inoperative electrical circuits, temperature and humidity complaints, piping malfunctions, steam / chilled water leaks, sump pump inoperability, etc. The Contractor shall remain on the job until the problem has been resolved.

C.4.3.2.3 Emergency Requests: Emergency requests will address circumstances that constitute an immediate danger to personnel or property, such as fire alarms, fire trouble alarms, broken utility pipes, electrical power outages, electrical problems which may cause fire or shock, gas or oil leaks, major air conditioning or heating problems, etc. The COTR or designated Government representative shall issue emergency requests. The Contractor shall respond to emergency requests immediately during normal working hours and within six (6) hours after normal working hours, on weekends and on holidays. In NO case shall the response time to an emergency service call exceed (1) hour for calls reported during normal working hours or six (6) hours for calls reported after normal working hours, on weekends, or on holidays. The Contractor shall remain on the job until the emergency has been resolved and the necessary repairs have been completed in the shortest possible time consistent with the nature of the problem and the best practices of the trade

C.4.3.2.4 Emergency or immediate requests shall be responded to in the shortest possible time consistent with the personnel s location at the time the problem is reported.

C.4.3.2.5 All Requests for Service for Emergency or Immediate requests shall be issued on a T&M basis with a not to exceed cost limit. If the contractor foresees costs above the limit set on the service request, additional funding will be negotiated and approved by the CO on an individual task order basis.

C.4.3.3 The time of response to each of the stated types of requests shall be calculated from the time the Contractor receives notification from the COTR.

C.4.3.4 Requests for service shall be made by the Government to the Contractor via one or more of the following methods: telephone, e-mail, radio, pager, or CAFM) system.

C.4.3.5 It will be the Contractor s responsibility to provide the government with all telephone numbers, e-mail addresses, and pager numbers of all personnel assigned to perform work in the facility and persons responsible for the dispatching of personnel for the contractor.

C.4.3.6 In the event that the Contractor cannot be reached at the time that the service is required, the response period shall start from the time that the call was initiated to the Contractor.

C.4.3.7 Service Request/Work Order/Repair Order Tracking: The Contractor shall enter the inspection, maintenance and repair information into the Government TMA maintenance management repair order tracking system (CAFM) as required in section C.2.1.4. All information entered into this system must be accurate and complete. As a minimum the following information shall be entered into the system:

a. Name, organization, and telephone number of person reporting the problem.
b. Time and date report was received.
c. Name of person who received the report.
d. Results of inspection tours
e. Description and location of deficiencies observed of the problem .
f. Location of the problem.
g. Description of the action taken to resolve observed deficiencies the problem.
h. Time and date work orders assigned by the AOC were completedcorrective action was completed.
i. Name and initials of person(s) who corrected the problem complete work orders assigned by the AOC.
j. Cost estimate, if applicable.
k. Hard copy service request / work order / repair logs (generated weekly).

C.4.3.8 Continuity of Services: The services covered by this contract are vital to the Government s mission and

continuity of the services must be maintained at the utmost proficiency without interruption.

C.4.3.9 The Contractor shall provide the COTR an emergency point of contact for coordinating emergency support.. The Contractor shall respond to emergency and immediate service requests 24 hours a day, 7 days a week, 365 days per year. The Contractor shall ensure the telephone numbers are current throughout the term of this contract.

C.4.4 Key Personnel: The Contractor shall propose a single point of contact to serve as the Contractor s authorized interface with the Government Contracting Officer (CO), and the contract level Contracting Officer's Technical Representative (COTR). This person shall be responsible for formulating and enforcing work standards, assigning contractor schedules, reviewing work discrepancies, supervising contractor personnel and communicating policies, purposes, and goals of the organization to subordinates, and shall be responsible for the overall contract performance.

C.4.5 Maintenance Service Quality Control Program: The Contractor shall establish a quality control program addressing all requirements of this contract. This program shall include specific quality control plans for each component of the contract including: operations of all equipment and systems, preventive and corrective maintenance; structural and systems repairs, and abatement projects. Quality control plans addressing each component of the contract shall be provided to the COTR within 30 calendar days after contract award for COTR approval. The quality control plans shall:

a. Incorporate checks and procedures to ensure all services are performed in accordance with highest industry standards for the same or similar services.
b. Include performance measures for identifying and correcting deficiencies in the quality of services before the level of performance becomes unacceptable.
c. Include a checklist for routine inspections that is tailored to the CPP and covers all services specified herein which shall be performed by the Contractor on a scheduled or unscheduled basis. The checklist used must be signed and dated by the Contractor upon completion of the inspection. The Contractor shall identify all personnel who shall be performing inspections by name, title, and type of inspection. Inspections shall not be performed by employees who are actually performing the work being inspected.
d. Provide quality control reports to the COTR on a monthly basis. The reports shall include performance problems identified (either by the COTR or the Contractor) and corrective measures taken.

C.4.5.1 Quality Control Inspections: The performance of inspections in accordance with the approved program is an essential part of this contract. All aspects of the approved plan shall be actively enforced. The Contractor shall maintain a file of all inspections conducted and corrective actions implemented by the Contractor, including offsite contractors within the facility. The inspection files shall be made available to the COTR during the term of the contract, as required. A copy of the inspection reports shall be submitted to the COTR by COB of the Monday of the following week. The COTR may compare inspections performed by the Contractor s inspectors with actual conditions that exist at that point in time.

C.4.5.2 Quality Control Inspections of Operation and Maintenance Services: Quality control inspections of operation inspection and maintenance services shall be performed at a minimum at the following frequencies:

a. Every 14 calendar days by the Contract Manager or COTR approved dedicated quality control inspector.
b. Monthly by the Contractor s qualified headquarters or corporate level personnel not performing onsite supervision, or having involvement with the normal performance of this contract.
c. Additional inspections may be performed by an independent commissioning firm at a frequency to be determined by the AOC.
d. The AOC reserves the right to contract for these third party services indentified in Paragraph C above.

END OF SECTION C

Section D - Packaging and Marking

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Section E - Inspection and Acceptance

E.1

52.252-2 Sec. E

52.252-2 CLAUSES INCORPORATED BY REFERENCE (FEB 1998)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address(es):

www.gsa.gov or www.arnet.gov

(End of clause)

Clauses By Reference

Clause	Title	Date
52.246-4	Inspection Of Services--Fixed Price	11/08/2006

Section F - Deliveries and Performance

AOC52.211-4

Term of Contract (Jan 2007)

The term of the contract shall be from award of the contract for a one year base period, with four-1Year Option Periods.

(End of clause)

F.1

F.1 PERFORMANCE LOCATIONS

.1 Services will be performed at the locations throughout the Capitol Power Plant Utility Distribution System.

F.2

F.2 HOURS OF PERFORMANCE

.1 Except as may be otherwise specified by the COTR or an Authorization Jurisdiction Representative, each employee shall work between 6:00 a.m. and 2:30 p.m., on a Monday through Friday schedule, excluding all Federal Government holidays, for that particular work assignment. The work period during any assignment is subject to interruption, contingent upon the legislative requirements of the Congress.

52.242-15

Stop-Work Order (Aug 1989)

(a) The Contracting Officer may, at any time, by written order to the Contractor, require the Contractor to stop all, or any part, of the work called for by this contract for a period of 90 days after the order is delivered to the Contractor, and for any further period to which the parties may agree. The order shall be specifically identified as a stop-work order issued under this clause. Upon receipt of the order, the Contractor shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of costs allocable to the work covered by the order during the period of work stoppage. Within a period of 90 days after a stop-work is delivered to the Contractor, or within any extension of that period to which the parties shall have agreed, the Contracting Officer shall either--

(1) Cancel the stop-work order; or

(2) Terminate the work covered by the order as provided in the Default, or the Termination for Convenience of the Government, clause of this contract.

(b) If a stop-work order issued under this clause is canceled or the period of the order or any extension thereof expires, the Contractor shall resume work. The Contracting Officer shall make an equitable adjustment in the delivery schedule or contract price, or both, and the contract shall be modified, in writing, accordingly, if--

(1) The stop-work order results in an increase in the time required for, or in the Contractor's cost properly allocable to, the performance of any part of this contract; and

(2) The Contractor asserts its right to the adjustment within 30 days after the end of the period of work stoppage; provided, that, if the Contracting Officer decides the facts justify the action, the Contracting Officer may receive and act upon the claim submitted at any time before final payment under this contract.

(c) If a stop-work order is not canceled and the work covered by the order is terminated for the convenience of the Government, the Contracting Officer shall allow reasonable costs resulting from the stop-work order in arriving at the termination settlement.

(d) If a stop-work order is not canceled and the work covered by the order is terminated for default, the Contracting Officer shall allow, by equitable adjustment or otherwise, reasonable costs resulting from the stop-work order.

(End of clause)

52.252-2 Sec. F

52.252-2 CLAUSES INCORPORATED BY REFERENCE (FEB 1998)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address(es):

www.gsa.gov or www.arnet.gov

(End of clause)

Clauses By Reference

Clause	Title	Date
52.247-34	F.O.B. Destination	11/08/2006

Section G - Contract Administration Data

AOC52.201-1

Contracting Officers Authority (Jun 2004)

The Contracting Officer is the only person authorized to make or approve any changes in any of the requirements of this contract, notwithstanding any provision contained elsewhere in this contract. In the event that the Contractor makes any change at the direction of any person other than the Contracting Officer, the change will be considered to have been made without authority and no adjustment will be made in the contract price to cover any increase in costs incurred as a result thereof.

(End of clause)

AOC52.201-2

Contracting Officers Technical Representative (COTR) (Mar 2005)

The Government shall provide the name, address and telephone number of the COTR at the time of contract award and the duties thereby delegated to that person. Any subsequent change to the individual or the individual s responsibilities will be confirmed in writing by the Contracting Officer. In no instance will the COTR be delegated authority to order any change in the contractor s performance which would affect (a) cost or schedule for contracts for services or supplies, or (b) scope, the completion date for intermediate phases or milestones, or overall completion date for contracts for construction.

(End of clause)

AOC52.211-1

KEY PERSONNEL (Apr 2007)

(a) The Contractor shall assign to this contract the following key personnel as proposed in the Contractor's technical proposal:

Name: _____

Title: _____ Telephone No._____

Name:_____

Title: _____ Telephone No._____

Name:_____

Title:_____ Telephone No. _____

(b) During the first ninety (90) days of performance, the Contractor shall make no substitutions of key personnel unless the substitution is necessitated by illness, death, or termination of employment. The Contractor shall notify the Contracting Officer within 15 calendar days after the occurrence of any of these events and provide the information required by Paragraph (c) below. After the initial 90-day period, the Contractor shall submit the information required by Paragraph (c) to the Contracting Officer at least 15 calendar days prior to making any permanent substitutions.

(c) The Contractor shall provide a detailed explanation of the circumstances necessitating the proposed substitutions, complete resumes for the proposed substitutions, and any additional information requested by the Contracting Officer. Proposed substitutes should have comparable qualifications to those of the person being replaced. The Contracting Officer will notify the Contractor within 15 calendar days after receipt of all required information of the decision on substitutions. The contract will be modified to reflect any approved changes of key personnel.

(d) The approval of substitute personnel will not be considered to be grounds for an increase in the contract price.

(e) The special security requirements in AOC52.223-5, Special Security Requirements, or AOC52.223-6, Special Security Requirements - U.S. Supreme Court, shall apply to all approved Contractor personnel substitutions.

(End of clause)

AOC52.211-2

Approval of Substitute Contractor Personnel (Jun 2004)

(a) During the first ninety days of performance, the Contractor shall make no substitutions of personnel unless the substitution is necessitated by illness, death, or termination of employment. The Contractor shall notify the Contracting Officer within 15 calendar days after the occurrence of any of these events and provide the information required by paragraph (b) below. After the initial 90-day period, the Contractor shall submit the information required by paragraph (b) to the Contracting Officer at least 15 calendar days prior to making any permanent substitutions.

(b) The Contractor shall provide a detailed explanation of the circumstances necessitating the proposed substitutions, complete resumes for the proposed substitutes, and any additional information requested by the Contracting Officer. Proposed substitutes should have comparable qualifications to those of the person being replaced.

(c) This paragraph applies only to a labor hour or time-and-materials contract. The Unit Price (hourly labor rate) for the approved substituted personnel shall remain the same as the rates of the relevant labor category, in the applicable Base Year or any of the subsequent Option Years (see the SCHEDULE OF ITEMS in Section B).

(d) The special security requirements in AOC52.223-5, Special Security Requirements, or AOC52.223-6, Special Security Requirements - U.S. Supreme Court, shall apply to all approved Contractor personnel substitutions.

(End of clause)

AOC52.223-5

Special Security Requirements - Services (Jun 2007)

(a) All vehicles, and contents, used by the Contractor or his subcontractors, which enter or leave United States Government property during performance of the work, will be subject to clearance, inspection and identification procedures conducted by the United States Capitol Police.

(b) All persons entering the Legislative Branch Buildings shall gain access to the building by passing through x-ray screening devices. In addition, all handbags and all hand-carried items shall be screened by x-ray devices prior to their entry into the building.

(c) All personnel provided by the Contractor and employed on the site of the work will be subject to a security background investigation. Each employee will be required to fill out an I.D. Request Form and U.S. Capitol Police Request for check of Criminal History Records and each employee will be photographed and fingerprinted. The Contractor shall provide any assistance required by any of its employees in completing the forms.

(d) Prior to commencement of work, the contractor and all designated on-site employees will be required, on a one-time basis, to be fingerprinted in Washington D.C. The location for the Electronic Fingerprinting Service is the U.S. Capitol Hill Police, Fairchild Building, 499 South Capitol Street SW, Washington, DC 20003.

(e) Within seven (7) calendar days after the date of contract award, the Contractor shall submit to the Contracting Officer's Technical Representative (COTR) a list of all employees proposed to be employed on this contract. This list shall include the employee's full name, date of birth and social security number.

(f) While security background investigations are in process, the Contractor's employees must not be granted access to the Capitol Hill complex to perform work or provide services for the AOC unless they are escorted by an AOC staff member. "Escorted" is defined to mean that the AOC staff member will remain with the employee(s) at all times during the performance of the work. Any of the Contractor's employees who are perceived by the Contracting Officer as a security risk as a result of evidence discovered in the background security investigation will not be issued an Identification Card, will be denied access to the site of the work, and the Contractor will be directed to remove such employee from performance of any of the contract work, whether it be on or off the work site. Any contractor employee denied access to the site of work on a contract or task/delivery order as a result of a security investigation may not apply for access to any other AOC/U.S. Supreme Court contract or task/delivery order work site.

(g) An identification card, with photograph, will be prepared for each employee of the Contractor requiring access to the site. The identification card shall be dated to indicate the period of time for which it is to remain valid - from the date the employee reports for duty until the applicable date which occurs first: the expiration of the contract, or the last date of the employee's tour of duty with the Contractor. All contractor personnel must wear the ID badge whenever on the Capitol complex premises or when attending off-site functions on behalf of the AOC. ID badges must be worn in such a manner that contractor personnel can be easily identified as such.

(h) The Contractor is fully responsible to return:

(1) The ID badge of any individual employee, including subcontractor personnel, who is removed for any reason including but not limited to illness, or dismissal;

(2) The ID badges of all contractor employees, including subcontractor personnel, whose performance under the contract is completed in advance of final contract job completion; and

(3) All outstanding ID badges issued for the contractor and its employees, including subcontractor personnel, within 24 hours of on site contract job completion.

(i) ID badges are to be hand delivered by the contractor within 24 hours of any of the events listed under (f) above to the Contracting Officer's Representative.

(j) The Contractor's failure to return any ID badge, access card, or key issued under this contract or order shall result in a deduction of $100.00 from the contract per ID badge, access card, and/or key not returned.

(End of clause)

AOC52.223-7

Special Security Clearance and Inspection Procedures (Jun 2004)

(a) All vehicles and contents used by the Contractor or his subcontractors which enter or leave United States Government property during performance of the work will be subject to clearance, inspection, and identification procedures conducted by the United States Capitol Police. See the attachment entitled U.S. CAPITOL POLICE NOTICE in Section J for instructions prior to delivery.

(b) All persons entering the Legislative Branch Buildings shall gain access to the building by passing through x-ray screening devices. In addition, all handbags and all hand-carried items shall be screened by x-ray devices prior to entry into the building.

(End of clause)

AOC52.223-8

DELIVERY VEHICLE INSPECTION REQUIREMENTS (Apr 2007)

(a) All vehicles and contents used by the Contractor or his subcontractors which enter or leave United States Government property during performance of work under this contract will be subject to clearance, inspection, and identification procedures conducted by the United States Capitol Police.

(b) Mobile Vehicle and Cargo Inspection System (Mobile VACIS). All delivery vehicles carrying fuel, garbage, or similar cargo that cannot be offloaded for inspection and security screening shall utilize the Mobile VACIS located at Third and Pennsylvania Avenue, NW, Washington, DC, for inspection prior to making deliveries to any building within the Capitol Complex, including, but not limited to, the U.S. Capitol Building; the U.S. Botanic Garden; the Hart, Dirksen, and Russell Senate Office Buildings; the Rayburn, Longworth, Cannon, and Ford House Office Buildings; the Thomas Jefferson, John Adams, and James Madison Memorial Library of Congress buildings; the Capitol Power Plant; the Capitol Visitors Center; and the U.S. Supreme Court and Thurgood Marshall Federal Judiciary Buildings.

(c) 4700 Shepherd Parkway SW inspection facility. All other vehicles making deliveries to the above listed locations except for the U. S. Supreme Court shall utilize the off-site inspection and screening facilites at 4700 Shepherd Parkway SW, Washington, DC 20032.

(d) For all deliveries within seven calendar days or prior to the first delivery, the contractor shall provide the following information to the U.S. Capitol Police:

(1) List of drivers;

(2) Date of birth for each driver;

(3) Social Security Number of each driver;

(4) Vehicle make;

(5) Vehicle model;

(6) License tag number and state where vehicle is licensed;

(7) Color of vehicle; and

(8) Contractor name, if shown on the vehicle.

(e) Information for deliveries made through the Mobile VACIS unit must be faxed to (202) 228-4313. For verification of receipt, the contractor may call (202) 224-9728. Updates to the information for Mobile VACIS deliveries must be sent to the U.S. Capitol Police throughout the period of performance of the contract.

(f) Information for deliveries made through the Shepherd Parkway facility must be faxed to (202) 226-0571. For verification of receipt, the contractor may call (202) 226-0905. Updates to the information must be renewed April 30, August 31, and December 31 of each year and provided to the U. S. Capitol Police whenever repetitive deliveries are anticipated.

(End of clause)

AOC52.242-2

CONTRACTOR PERFORMANCE EVALUATIONS (DEC 2006)

At the conclusion of contract performance and/or at any point during the performance of this contract, the AOC may elect to evaluate the Contractor and submit a final or interim performance evaluation into the appropriate on-line database designated as the repository of Contractor evaluations for the Federal Government. Any evaluation submitted shall include input from the Contracting Officer's Technical Representative and other agency personnel, as appropriate, and the Contracting Officer. The Contractor shall have the opportunity to review any evaluations and submit supporting information for any differing of positions between the Contractor and the AOC in accordance with the protocol established by the specific on-line database.

(End of clause)

Section H - Special Contract Requirements

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Section I - Contract Clauses

52.216-18

Ordering (Oct 1995)

(a) Any supplies and services to be furnished under this contract shall be ordered by issuance of delivery orders or task orders by the individuals or activities designated in the Schedule. Such orders may be issued from date of award of the contract through September 30, 2012.

(b) All delivery orders or task orders are subject to the terms and conditions of this contract. In the event of conflict between a delivery order or task order and this contract, the contract shall control.

(c) If mailed, a delivery order or task order is considered "issued" when the Government deposits the order in the mail. Orders may be issued orally, by facsimile, or by electronic commerce methods only if authorized in the Schedule.

(End of clause)

52.216-19

Order Limitations (Oct 1995)

(a) Minimum order. When the Government requires supplies or services covered by this contract in an amount of less than $5,000.00, the Government is not obligated to purchase, nor is the Contractor obligated to furnish, those supplies or services under the contract.

(b) Maximum order. The Contractor is not obligated to honor--

(1) Any order for a single item in excess of $100,000.00;

(2) Any order for a combination of items in excess of $100,000.00; or

(3) A series of orders from the same ordering office within $100,000.00 days that together call for quantities exceeding the limitation in paragraph (b)(1) or (2) of this section.

(c) If this is a requirements contract (i.e., includes the Requirements clause at subsection 52.216-21 of the Federal Acquisition Regulation (FAR)), the Government is not required to order a part of any one requirement from the Contractor if that requirement exceeds the maximum-order limitations in paragraph (b) of this section.

(d) Notwithstanding paragraphs (b) and (c) of this section, the Contractor shall honor any order exceeding the maximum order limitations in paragraph (b), unless that order (or orders) is returned to the ordering office within 30 days days after issuance, with written notice stating the Contractor's intent not to ship the item (or items) called for and the reasons. Upon receiving this notice, the Government may acquire the supplies or services from another source.

(End of clause)

52.216-21

Requirements (Oct 1995)

(a) This is a requirements contract for the supplies or services specified, and effective for the period stated, in the Schedule. The quantities of supplies or services specified in the Schedule are estimates only and are not purchased by this contract. Except as this contract may otherwise provide, if the Government's requirements do not result in orders in the quantities described as "estimated" or "maximum" in the Schedule, that fact shall not constitute the basis for an equitable price adjustment.

(b) Delivery or performance shall be made only as authorized by orders issued in accordance with the Ordering clause. Subject to any limitations in the Order Limitations clause or elsewhere in this contract, the Contractor shall furnish to the Government all supplies or services specified in the Schedule and called for by orders issued in accordance with the Ordering clause. The Government may issue orders requiring delivery to multiple destinations or performance at multiple locations.

(c) Except as this contract otherwise provides, the Government shall order from the Contractor all the supplies or services specified in

the Schedule that are required to be purchased by the Government activity or activities specified in the Schedule.

(d) The Government is not required to purchase from the Contractor requirements in excess of any limit on total orders under this contract.

(e) If the Government urgently requires delivery of any quantity of an item before the earliest date that delivery may be specified under this contract, and if the Contractor will not accept an order providing for the accelerated delivery, the Government may acquire the urgently required goods or services from another source.

(f) Any order issued during the effective period of this contract and not completed within that period shall be completed by the Contractor within the time specified in the order. The contract shall govern the Contractor's and Government's rights and obligations with respect to that order to the same extent as if the order were completed during the contract's effective period; provided, that the Contractor shall not be required to make any deliveries under this contract after September 30, 2012.

(End of clause)

52.216-22

Indefinite Quantity (Oct 1995)

(a) This is an indefinite-quantity contract for the supplies or services specified, and effective for the period stated, in the Schedule. The quantities of supplies and services specified in the Schedule are estimates only and are not purchased by this contract.

(b) Delivery or performance shall be made only as authorized by orders issued in accordance with the Ordering clause. The Contractor shall furnish to the Government, when and if ordered, the supplies or services specified in the Schedule up to and including the quantity designated in the Schedule as the "maximum." The Government shall order at least the quantity of supplies or services designated in the Schedule as the "minimum."

(c) Except for any limitations on quantities in the Order Limitations clause or in the Schedule, there is no limit on the number of orders that may be issued. The Government may issue orders requiring delivery to multiple destinations or performance at multiple locations.

(d) Any order issued during the effective period of this contract and not completed within that period shall be completed by the Contractor within the time specified in the order. The contract shall govern the Contractor's and Government's rights and obligations with respect to that order to the same extent as if the order were completed during the contract's effective period; *provided*, that the Contractor shall not be required to make any deliveries under this contract after September 30, 2012.

(End of clause)

52.217-9

Option to Extend the Term of the Contract (Mar 2000)

(a) The Government may extend the term of this contract by written notice to the Contractor within
the last 60 days of the period of performance; provided that the Government gives the Contractor a preliminary written notice of its intent to extend at least 60 days [60 days unless a different number of days is inserted] before the contract expires. The preliminary notice does not commit the Government to an extension.

(b) If the Government exercises this option, the extended contract shall be considered to include this option clause.

(c) The total duration of this contract, including the exercise of any options under this clause, shall not exceed
five years.

(End of clause)

52.232-18

Availability of Funds (Apr 1984)

Funds are not presently available for this contract. The Government's obligation under this contract is contingent upon the availability of appropriated funds from which payment for contract purposes can be made. No legal liability on the part of the Government for any payment may arise until funds are made available to the Contracting Officer for this contract and until the Contractor receives notice of such availability, to be confirmed in writing by the Contracting Officer.

(End of clause)

52.243-7

52.243-7 NOTIFICATION OF CHANGES (APR 1984)

(a) *Definitions*. "Contracting Officer," as used in this clause, does not include any representative of the Contracting Officer.

"Specifically authorized representative (SAR)," as used in this clause, means any person the Contracting Officer has so designated by written notice (a copy of which shall be provided to the Contractor) which shall refer to this subparagraph and shall be issued to the designated representative before the SAR exercises such authority.

(b) *Notice*. The primary purpose of this clause is to obtain prompt reporting of Government conduct that the Contractor considers to constitute a change to this contract. Except for changes identified as such in writing and signed by the Contracting Officer, the Contractor shall notify the Administrative Contracting Officer in writing, within _____ (to be negotiated) calendar days from the date that the Contractor identifies any Government conduct (including actions, inactions, and written or oral communications) that the Contractor regards as a change to the contract terms and conditions. On the basis of the most accurate information available to the Contractor, the notice shall state--

(1) The date, nature, and circumstances of the conduct regarded as a change;
(2) The name, function, and activity of each Government individual and Contractor official or employee involved in or knowledgeable about such conduct;
(3) The identification of any documents and the substance of any oral communication involved in such conduct;
(4) In the instance of alleged acceleration of scheduled performance or delivery, the basis upon which it arose;
(5) The particular elements of contract performance for which the Contractor may seek an equitable adjustment under this clause, including--

(i) What contract line items have been or may be affected by the alleged change;
(ii) What labor or materials or both have been or may be added, deleted, or wasted by the alleged change;
(iii) To the extent practicable, what delay and disruption in the manner and sequence of performance and effect on continued performance have been or may be caused by the alleged change;
(iv) What adjustments to contract price, delivery schedule, and other provisions affected by the alleged change are estimated; and

(6) The Contractor's estimate of the time by which the Government must respond to the Contractor's notice to minimize cost, delay or disruption of performance.

(c) *Continued performance*. Following submission of the notice required by (b) above, the Contractor shall diligently continue performance of this contract to the maximum extent possible in accordance with its terms and conditions as construed by the Contractor, unless the notice reports a direction of the Contracting Officer or a communication from a SAR of the Contracting Officer, in either of which events the Contractor shall continue performance; provided, however, that if the Contractor regards the direction or communication as a change as described in (b) above, notice shall be given in the manner provided. All directions, communications, interpretations, orders and similar actions of the SAR shall be reduced to writing and copies furnished to the Contractor and to the Contracting Officer. The Contracting Officer shall countermand any action which exceeds the authority of the SAR.

(d) *Government response*. The Contracting Officer shall promptly, within _____ (to be negotiated) calendar days after receipt of notice, respond to the notice in writing. In responding, the Contracting Officer shall either--

(1) Confirm that the conduct of which the Contractor gave notice constitutes a change and when necessary direct the mode of further performance;
(2) Countermand any communication regarded as a change;
(3) Deny that the conduct of which the Contractor gave notice constitutes a change and when necessary direct the mode of further performance; or
(4) In the event the Contractor's notice information is inadequate to make a decision under (1), (2), or (3) above, advise the Contractor what additional information is required, and establish the date by which it should be furnished and the date thereafter by which the Government will respond.

(e) *Equitable adjustments*. (1) If the Contracting Officer confirms that Government conduct effected a change as alleged by the Contractor, and the conduct causes an increase or decrease in the Contractor's cost of, or the time required for, performance of any part of the work under this contract, whether changed or not changed by such conduct, an equitable adjustment shall be made--

(i) In the contract price or delivery schedule or both; and
(ii) In such other provisions of the contract as may be affected.

(2) The contract shall be modified in writing accordingly. In the case of drawings, designs or specifications which are defective and for which the Government is responsible, the equitable adjustment shall include the cost and time extension for delay reasonably incurred by the Contractor in attempting to comply with the defective drawings, designs or specifications before the Contractor identified, or reasonably should have identified, such defect. When the cost of property made obsolete or excess as a result of a change

confirmed by the Contracting Officer under this clause is included in the equitable adjustment, the Contracting Officer shall have the right to prescribe the manner of disposition of the property. The equitable adjustment shall not include increased costs or time extensions for delay resulting from the Contractor's failure to provide notice or to continue performance as provided, respectively, in (b) and (c) above.

NOTE: The phrases "contract price" and "cost" wherever they appear in the clause, may be appropriately modified to apply to cost-reimbursement or incentive contracts, or to combinations thereof.

(End of clause)

52.246-20

Warranty of Services (May 2001)

(a) *Definition*. "Acceptance," as used in this clause, means the act of an authorized representative of the Government by which the Government assumes for itself, or as an agent of another, ownership of existing and identified supplies, or approves specific services, as partial or complete performance of the contract.

(b) Notwithstanding inspection and acceptance by the Government or any provision concerning the conclusiveness thereof, the Contractor warrants that all services performed under this contract will, at the time of acceptance, be free from defects in workmanship and conform to the requirements of this contract. The Contracting Officer shall give written notice of any defect or nonconformance to the Contractor
[Contracting Officer shall insert the specific period of time in which notice shall be given to the Contractor]

This notice shall state either--

(1) That the Contractor shall correct or reperform any defective or nonconforming services; or

(2) That the Government does not require correction or reperformance.

(c) If the Contractor is required to correct or reperform, it shall be at no cost to the Government, and any services corrected or reperformed by the Contractor shall be subject to this clause to the same extent as work initially performed. If the Contractor fails or refuses to correct or reperform, the Contracting Officer may, by contract or otherwise, correct or replace with similar services and charge to the Contractor the cost occasioned to the Government thereby, or make an equitable adjustment in the contract price.

(d) If the Government does not require correction or reperformance, the Contracting Officer shall make an equitable adjustment in the contract price.

(End of clause)

AOC52.202-1

Definitions (Jun 2004)

(a) The term "head of the agency" as used herein means the Committee, Commission, or other authority of the Legislative Branch of the Government having final jurisdiction or supervision over the work involved. The term "other authority" as used in this paragraph includes the Contracting Officer in cases in which he has final jurisdiction or supervision over the work involved.

(b) The term "Architect" as used herein means the Architect of the Capitol.

(c) The term "Contracting Officer" as used herein means the Architect of the Capitol or his duly authorized representative.

(d) The term "his duly authorized representative" as used herein means any person or persons or board authorized to act for the head of the agency within the scope of their authority.

(e) Except as otherwise provided in this contract, the term "subcontracts" includes purchase orders placed for performance under this contract.

(End of clause)

AOC52.203-1

Advertising/Promotional Materials (Dec 2005)

(a) It is the policy of the Congress to discourage contractors providing services and supplies to the Legislative Branch entities,

including the Architect of the Capitol, from advertising practices that feature the Capitol and Capitol Complex in a manner in which conveys, or is reasonably calculated to convey, a false impression of sponsorship, approval or endorsement of any product or service by the Congress, the Government of the United States, or any Department, Agency or instrumentality thereof.

(b) Contractors performing construction services for Legislative Branch entities, including the Architect of the Capitol, are discouraged from capitalizing on their contractual relationships with such entities and shall not engage in advertising practices which convey, or are reasonably calculated to convey, a false impression of sponsorship, approval or endorsement of any product or service by the Congress, the Government of the United States, of any Department, Agency or instrumentality thereof. This includes utilizing, in conjunction with the fact of their contractual relationship, images of the Capitol, any other buildings in the Capitol Complex, or any part of the United States Capitol Grounds in their advertising or promotional materials; and/or publishing or disseminating the aforementioned advertising or promotional materials.

(c) The Contractor, by signing this contract, agrees to comply with the foregoing and to submit any proposed advertising or promotional copy connected in any manner with this contract and/or the Capitol, other Capitol Complex Buildings, or the United States Capitol Grounds to the Contracting Officer for approval prior to publication.

(d) If this solicitation is for supplies or services, including construction, to be provided to or performed for the United States Supreme Court, the Contractor, by signing this contract, agrees that he or she will not advertise the award of the contract in his/her commercial advertising in such a manner as to state or imply that the Supreme Court of the United States endorses a product, project, or commercial line of endeavor.

(End of clause)

AOC52.203-2

Disclosure of Information to the General Public (Jun 2004)

(a) Promptly after receiving any request from the general public for information on or data derived from this contract, the contractor shall notify the Architect of the Capitol, Procurement Division. The contractor shall cooperate with the Procurement Division in compiling or collecting information or data if the Architect of the Capitol determines the information or data to be releasable.

(b) General public, for purposes of this clause, are those groups or individuals who are not authorized by law or regulation to have access.

(c) This clause is not intended to prevent the contractor from providing contract information or data which the contractor is required to provide in order to conduct its business, such as insurance, banking, subcontracting.

(d) The contractor is permitted to request that proprietary information or data not be released if such release would harm or impair the contractor in conducting its normal business. Such request must be documented with clear and specific grounds for that claim.

(End of clause)

AOC52.203-3

Officials Not to Benefit (Nov 2004)

No Member of or Delegate to Congress or Resident Commissioner shall be admitted to any share or part of this contract or to any benefit that may arise therefrom.

(End of clause)

AOC52.203-4

Dissemination of Contract Information (Nov 2004)

Unless otherwise provided in this contract, the Contractor shall not publish, permit to be published, or distribute for public consumption, any information, oral or written, concerning the results of, conclusions made pursuant to, or performance under this contract without prior written consent of the Contracting Officer, until such time as the Government may have released such information to the public.

(End of clause)

AOC52.203-5

Confidentiality Requirement (Nov 2004)

The Contractor agrees that any information supplied by the Architect to the Contractor shall be considered confidential and/or proprietary, and agrees to hold such information in confidence. The Contractor further agrees not to disclose such information to a third party without the prior written consent of the Architect.

(End of clause)

AOC52.204-1

Printed or Copied Double-sided on Recycled Paper (Jun 2004)

The Contractor is encouraged to submit paper documents, such as offers, letters, or reports, that are printed or copied doubled-sided on recycled paper and meet minimum content standards when not using electronic commerce methods to submit information or data to the Government.

(End of clause)

AOC52.204-4

AOC52.204-4 Personal Identity Verification of Contractor Personnel (Sep 2007)

(a) By entering into this contract, the Contractor agrees to comply with all Federal laws that apply to the Contractor's activities, including but not limited to the U.S. Citizenship and Immigration Services' requirement to maintain a signed copy of I-9 Employment Eligibility Verification for each employee in accordance with 8 U.S.C. 1324(a).

(b) The Employment Eligibility Verification Program (E-Verify), operated by the Department of Homeland Security and the Social Security Administration, allows U.S. employers to verify name, date of birth, and Social Security Number, as well as immigration information for non-citizens, against Federal databases in order to verify the employment eligibility of both citizen and non-citizen new hires. All contractors receiving AOC contracts are strongly encouraged to use this program to verify the status of their personnel. Information about the program can be obtained at www.dhs.gov/E-Verify or by calling 1-888-464-4218.

(c) The Contractor shall insert this clause in all subcontracts when the subcontractor is required to have physical access to a Federally-controlled facility or access to a Federal information system.

(End of clause)

AOC52.215-10

Examination of Records (Jun 2004)

(a) The Contractor agrees that the Architect of the Capitol or any duly authorized representatives shall, until the expiration of 3 years after final payment under this contract, have access to and the right to examine any books, accounting procedures and practices documents, papers, records and other data regardless of whether such items are in written form, in the form of computer data or in any other form and other supporting evidence, involving transactions related to this contract or compliance with any clause or certification thereunder.

(b) The Contractor further agrees to include in all its subcontracts hereunder a provision to the effect that subcontractor agrees that the Architect of the Capitol or any authorized representatives shall, until the expiration of 3 years after final payment under the subcontract, have access to and the right to examine books, documents, papers, records other data regardless of whether such items are in written form, in the form of computer data or in any other form, and other supporting evidence, involving transactions related to the subcontract or compliance with any clause or certification thereunder.

(c) The term subcontract as used in this clause excludes purchase orders not exceeding $10,000.

(End of clause)

AOC52.219-1

Utilization of Small Business Concerns (Aug 2004)

(a) It is the policy of the Government as declared by the Congress that a fair proportion of the purchases and contracts for supplies and services for the Government be placed with all types of small business concerns as determined by the size standards in 13 CFR 121.

(b) The Contractor agrees to accomplish the maximum amount of subcontracting to all types of small business concerns that the Contractor finds to be consistent with the efficient performance of this contract.

(End of clause)

AOC52.222-3

Convict Labor (Jun 2004)

In connection with the performance of work under this contract the Contractor agrees not to employ any person undergoing sentence of imprisonment except as provided by Public Law 89-176, approved September 10, 1965, 18 U.S.C. 4082(c)(2).

(End of clause)

AOC52.222-4

Overtime Work (Aug 2004)

No extra reimbursement will be allowed for work performed outside regular working hours or on Saturdays, Sundays, or holidays and, for work performed in the District of Columbia, Presidential Inauguration Day, unless such work is authorized by the Contracting Officer; and provided such work is not otherwise required to be performed under the terms of the contract. If said authorization is verbal, with written verification thereof by signature of the Contracting Officer on the employee's weekly time record (see AOC52.232-2, Payments - Services or AOC52.232-3, Payments - Services Utilizing Time Records).

(End of clause)

AOC52.222-5

Collective Bargaining Agreements (Jun 2004)

The Contractor shall comply with the requirements of Paragraph 52.222-41(m), Service Contract Act of 1965, as amended, regarding collective bargaining agreements. The information required shall be FAXED to 202-225-3221 or hand carried to: Procurement Division, Room H2-263, Ford House Office Building, 2nd and "D" Streets, S.W., Washington, D.C. - 20515. The agreement can also be FEDEXed to the following address:

Architect of the Capitol
Procurement Division
Ford House Office Building
Attn: [Contract Specialist's Name]
Room H2-263
Second and D Streets, S.W.
Washington, DC 20515

(End of clause)

AOC52.223-4

Transmission or Posting of Drawings/Specifications (Jun 2004)

Due to security issues, the contractor is strictly prohibited from placing or transmitting drawings and specifications on the internet or modem without express permission from the Architect of the Capitol.

(End of clause)

AOC52.223-9

Accident Prevention and Safety and Health Programs (Sep 2004)

(a) The Contractor shall comply with the safety and health standards published in 41 C.F.R. Part 50-205, including any matters incorporated by reference therein.

(b) The Contractor shall also comply with the regulations issued by the Secretary of Labor pursuant to the Williams-Steiger Occupational Safety and Health Act of 1970, as set forth in Title 29 of the Code of Federal Regulations.

(c) The Contractor shall bring to the attention of the Architect any work encountered that may involve entry into a suspected confined space as defined by OSHA. A determination will be made by the Architect, and if the areas is deemed a permit required confined

space, additional protective measures will be needed, per OSHA requirements.

(d) In the event that conditions on the site pose an imminent danger or threat to the Contractor s workers, the public, Government employees, other persons, or to Capitol complex structures and property of historical significance, the Contracting Officer can verbally order the Contractor to stop work operations in the specified area until said conditions are corrected to the Contracting Officer s satisfaction. The Contracting Officer shall promptly issue a written order to stop the work to the Contractor formalizing the specifics of the verbal stop work order.

(e) The Contractor shall not be entitled to any equitable adjustment of the contract price or extension of the performance schedule on any stop work order issued under this clause.

(End of clause)

AOC52.228-2

Insurance - Work on a Government Installation (Jul 2005)

(a) The Contractor shall, at his own expense, provide and maintain during the entire performance of this contract at least the kinds and minimum amounts of insurance as required in this clause.

(b) Within twenty (20) calendar days after the date of contract award or before commencing work under this contract, whichever is earlier, the Contractor shall notify the Contracting Officer in writing that the required insurance has been obtained. A Certificate of Insurance evidencing the Contractor's compliance with the requirements of this clause, identifying all policies of insurance and sureties proposed for the provision of liability coverage pertinent to the work of the instant contract, including the endorsement required in this paragraph, and manually countersigned by an authorized representative of the insurance company shall be submitted in accordance with the time frame stated in this paragraph. All policies for liability protection, bodily injury, or property damage shall include the United States of America, acting by and through the Architect of the Capitol, as an additional insured with respect to operations under this contract. Each policy of insurance shall contain the following endorsement, which may be attached as a rider:

"It is understood and agreed that the Contractor's Insurance Company or surety shall notify the Architect of the Capitol, in writing, thirty (30) calendar days in advance of the effective date of any reduction in or cancellation of this policy."

(c) Insurance and required minimum liability limits are:

(1) Appropriate bodily injury and property damage liability insurance, with limits of not less than $500,000 for each occurrence and $2,000,000 for annual aggregate, including requirements for protection of hoisting and scaffolding operations, when applicable, and servicing areas adjacent to the building;

(2) Automobile bodily injury liability insurance with limits of not less than $200,000 for each person and $500,000 for each accident, and property liability insurance, with a limit of not less than $20,000 for each accident. A combined single limit for these coverages is acceptable; and/or

(3) Workmen's compensation insurance as required by the laws of (1) the District of Columbia for work performed on a Government site located in the District of Columbia; (2) the State of Maryland for work performed on a Government site located in Maryland; or (3) the Commonwealth of Virginia for work performed on a Government site located in Virginia.

(d) The Contractor shall insert the substance of this clause, including this paragraph, in subcontracts under this contract that require work on a Government installation, and shall require subcontractors to provide and maintain the insurance required in this clause. The Contractor shall maintain a copy of all subcontractors proofs of required insurance, and shall make copies available to the Contracting Officer upon request.

(End of clause)

AOC52.228-4

Indemnification and Hold Harmless Agreement (Jun 2004)

The Contractor agrees to indemnify and hold the Government harmless against any and all claims for damages to persons or property from any cause or causes whatsoever arising out of the performance of services covered by the contract; including, but not limited to, errors, omissions or negligent acts of the Contractor, but excluding active negligence of the Government, and against any and all costs, expenses, attorney's fees, and liability incurred by the Government in defending against such claims, whether the same proceed to judgement or not. In the prosecution of any successful claim or suit by the Government for the enforcement of this contract, the Contractor shall reimburse the Government for any reasonable attorney's fees and costs of claim or suit incurred by the Government.

(End of clause)

AOC52.232-2

Payments - Services (Mar 2006)

(a) Invoices shall be issued at the end of each month in which services are performed by the Contractor. Until further notice, properly certified invoices shall be FAXED to the Accounting Office, Architect of the Capitol at 202-226-2580. Information concerning requirements for payment requisitions must be secured by telephoning the Accounting Officer at (202) 226-2552. Payment will be made on a monthly basis. To assist the AOC in making timely payments, the Contractor is requested to furnish the following additional information on the invoice:

(1) Contract number;

(2) Name, address and Taxpayer I.D.of Contractor;

(3) Invoice Date;

(4) Unique invoice number for that particular invoice;

(5) Period the payment covers; and

(6) Amount by line item including quantity and unit pricing (see SCHEDULE OF ITEMS in Section B).

(b) Requirement when contractor employee(s) is provided on-site office space. As verification of the above time records submitted by the Contractor, each of the Contractor s employees will be required to sign and submit to the COTR a weekly time record sheet, as provided by the Architect, showing the number of regular and overtime hours, if any, worked by that employee during that week. The time record sheet will be verified and countersigned, if correct, by the COR and a copy thereof will be provided to the Contractor for record purposes.

(c) Payments will be made directly to the contractor s financial institution through Direct Deposit/Electronic Funds Transfer (DD/EFT). The Contractor s attention is directed to the requirements of AOC52.232-6, Payment by Electronic Funds Transfer - Other Than Central Contractor Registration.

(End of clause)

AOC52.232-6

Payment by Electronic Funds Transfer - Other than Central Contractor Registration (Jun 2004)

(a) Method of payment.

(1) All payments by the Government under this contract shall be made by electronic funds transfer (EFT) except as provided in paragraph (a)(2) of this clause. As used in this clause, the term "EFT" refers to the funds transfer.

(2) In the event the Government is unable to release one or more payments by EFT, the contractor agrees to either

(i) Accept payment by check or some other mutually agreeable method of payment; or

(ii) Request the Government to delay payment until such time as the Government makes payment by EFT (but see paragraph (d)).

(b) Mandatory submission of Contractor s EFT information. (1) The Contractor is required to provide the Government with the information required to make payment by EFT (see paragraph (i) of this clause). The contractor shall provide this information directly to the office designated in paragraph (k) to receive that information (hereafter: "designated office") by three working days after notification of contract award. If not otherwise specified in this contract, the payment office is the designated office for receipt of the contractor s EFT information. If more than one designated office is named for the contract, the contractor shall provide a separate notice to each office. In the event that the EFT information changes, the contractor shall be responsible for providing the updated information to the designated office(s).

(2) If the contractor provides EFT information applicable to multiple contracts, the contractor shall specifically state the applicability of this EFT information in terms acceptable to the designated office. However, EFT information supplied to a designated office shall be applicable only to contracts that identify that designated office as the office to receive EFT information for that contract.

(c) Mechanisms for EFT payment. The Government may make payment by EFT through the Automated Clearing House (ACH) network, subject to the rules of the National Automated Clearing House Association. The rules governing Federal payments through

the ACH are contained in 31 CFR part 210.

(d) Suspension of payment.

(1) Notwithstanding the provisions of any other clause of this contract, the Government is not required to make any payment under this contract until after receipt, by the designated payment office, of the correct EFT payment information from the Contractor. Until receipt of the correct EFT information, any invoice or contract financing request shall be deemed not to be a valid invoice.

(2) If the EFT information changes after submission of correct EFT information, the Government shall begin using the changed EFT information no later than the 30 days after its receipt by the designated office to the extent payment is made by EFT. However, the Contractor may request that no further payments be made until the changed EFT information is implemented by the payment office.

(e) Liability for uncompleted or erroneous transfers. (1) If an uncompleted or erroneous transfer occurs because the Government failed to use the Contractor provided EFT information in the correct manner, the Government remains responsible for--

(i) Making a correct payment; and

(ii) Recovering any erroneously directed funds.

(2) If an uncompleted or erroneous transfer occurs because Contractor s EFT information was incorrect at the time of Government release or was revised within 30 days of Government release of the EFT payment transaction instruction to the Federal Reserve System, and

(i) If the funds are no longer under the control of the payment office, the Government is deemed to have made payment and the Contractor is responsible for recovery of any erroneously directed funds; or

(ii) If the funds remain under the control of the payment office, the Government shall not make payment and the provisions of paragraph (d) shall apply.

(f) EFT and assignment of claims. If the contractor assigns the proceeds of this contract as provided for in the assignment of claims terms of this contract, the contractor shall require as a condition of any such assignment that the assignee shall provide the EFT information required by paragraph (i) of this clause to the designated office and shall be paid by EFT in accordance with the terms of this clause. In all respects, the requirements of this clause shall apply to the assignee as if it were the contractor. EFT information that shows the ultimate recipient of the transfer to be other than the contractor, in the absence of a proper assignment of claims acceptable to the Government, is incorrect EFT information within the meaning of Paragraph (d) of this clause.

(g) Liability for change of EFT information by financial agent. The Government is not liable for errors resulting from changes to EFT information provided by the contractor s financial agent.

(h) Payment information. The payment or disbursing office shall forward to the Contractor available payment information that is suitable for transmission as of the date of release of the EFT instruction to the Federal Reserve System. The Government may request the Contractor to designate a desired format and method(s) for delivery of payment information from a list of formats and methods the payment office is capable of executing. However, the Government does not guarantee that any particular format or method of delivery is available at any particular payment office and retains the latitude to use the format and delivery method most convenient to the Government. If the Government makes payment by check in accordance with paragraph (a) of this clause, the Government shall mail the payment information to the remittance address in the contract.

(i) EFT Information. The contractor shall provide the following information to the designated payment office. The contractor may supply this data for this or multiple contracts (see paragraph (b) of this clause). The Contractor shall designate a single financial agent per contract capable of receiving and processing the EFT information using the EFT methods described in paragraph (c) of this clause. The information required is as follows:

(1) The contract number;

(2) The contractor s name and remittance address as stated in the contract(s);

(3) The signature (manual or electronic, as appropriate), title, and telephone number of the contractor s official authorized to provide this information;

(4) The name, address, and 9 digit Routing Transit Number of the contractor s financial agent; and

(5) The contractor s account number and the type of account (checking, saving or lockbox).

(j) The Contractor shall send all EFT information, and any changes to EFT information to the office designated in paragraph (k) of this

clause. The Contractor shall not send EFT information to the payment office, or any other office than that designated in paragraph (k). The Government need not use any EFT information sent to any office other than that designated in paragraph (k).

(k) Designated office:

Name:
Architect of the Capital
Accounting Division
Mailing Address:
2nd and D Streets SW
Ford House Office Building
Washington, DC 20515

Telephone:
(202) 226-2552
Facsimile:
(202) 225-7321

(End of clause)

AOC52.232-7

Discounts (Aug 2004)

(a) Discounts for prompt payment will not be considered in the evaluation of offers. However, any offered discount will form a part of the award, and will be taken if payment is made within the discount period indicated in the offer by the offeror. As an alternative to offering a prompt payment discount in conjunction with the offer, offerors awarded contracts may include prompt payment discounts on individual invoices.

(b) In connection with any discount offered for prompt payment, time shall be computed from the date of the invoice. If the Contractor has not placed a date on the invoice, the due date shall be calculated from the date the designated billing office receives a proper invoice, provided the agency annotates such invoice with the date of receipt at the time of receipt. For the purpose of computing the discount earned, payment shall be considered to have been made on the date that appears on the payment check or, for an electronic funds transfer, the specified payment date. When the discount date falls on a Saturday, Sunday, or legal holiday and, for work performed in the District of Columbia, Presidential Inauguration Day, when Federal Government offices are closed and Government business is not expected to be conducted, payment may be made on the following business day.

(End of clause)

AOC52.232-12

Assignment - Supplement (Sep 2004)

Neither the contract nor any interest therein shall be assigned. However, moneys due or to become due under the contract may be assigned in accordance with the provisions of FAR clause 52.232-23 (ASSIGNMENT OF CLAIMS) as incorporated by reference in Section I.

(End of clause)

AOC52.233-2

Claims for Equitable Adjustments - Waiver and Release of Claims (Jun 2004)

(a) Whenever the Contractor submits a claim for equitable adjustment under any paragraph of this contract which provides for equitable adjustment of the contract, such claim shall include all types of adjustments in the total amounts to which the paragraph entitles the Contractor, including but not limited to adjustments arising out of delays or disruptions or both caused by such change. Except as the parties may otherwise expressly agree, the Contractor shall be deemed to have waived (1) any adjustments to which it otherwise might be entitled under the paragraph where such claims fail to request such adjustments, and (2) any increase in the amount of equitable adjustments additional to those requested in its claim.

(b) Further, the Contractor agrees that, if required by the Contracting Officer, he will execute a release, in form and substance satisfactory to the Contracting Officer, as part of the supplemental agreement setting forth the aforesaid equitable adjustment, and that such release shall discharge the Government, its officers, agents and employees, from any further claims, including but not limited to further claims arising out of delays or disruptions or both, caused by the aforesaid change.

(End of clause)

AOC52.233-4

Damages for Delay (Nov 2004)

(a) The Architect shall not be obligated or liable to the Contractor for, and the Contractor hereby expressly waives any claims against the Architect on account of, any damages, costs, or expenses, of any nature whatsoever, which the Contractor or his subcontractors at any tier may incur as a result of delays, interferences, disruptions, suspensions, changes in sequence or the like arising from or out of any act or omission of the Architect, it being understood and agreed that the Contractor's sole and exclusive remedy in such event shall be an extension of the contract time, but only in accordance with the provisions of the Contract Documents.

(b) To the extent that any other provision of this contract is inconsistent with the provisions of this article such other sections will be superseded hereby with respect to the issue of delay damages.

(End of clause)

AOC52.245-1

Inventory Control and Indemnification of Property (Jun 2004)

(a) The Contractor shall be liable for the return of the articles picked-up for service under this contract, in accordance with the count as reflected on the "INVENTORY CONTROL VOUCHER" (ICV); see sample attached in Section J. A separate ICV will be completed for each pick-up and verified against the ICV at the time of delivery.

(b) Two copies of each verified ICV shall be given to the Contractor's representative at the time of delivery; one of which shall be submitted with the Contractor's payment invoice. Failure of the Contractor's representative to verify, by signature on the ICV, any of the ICV totals will be at the Contractor's own risk for purposes of determining any loss of, or damage to, the articles to be serviced under this contract.

(c) The Contractor shall indemnify the Government for any property delivered to the Contractor for servicing under this contract which is lost, or which is damaged and, in the opinion of the Contracting Officer, cannot be repaired satisfactorily. In either of these events, the Contractor shall pay to the Government the value thereof in accordance with Federal Supply Schedule price lists. If the property is not on these price lists, the Contracting Officer shall determine a fair and just price. Credit shall be allowed for any depreciation in the value of the property at the time of loss or damage, and the parties hereto shall determine the amount of the allowable credit. If the parties fail to agree upon the value of the property, or fail to agree on the amount of credit due, the dispute shall be determined as provided in AOC52.233-1, Disputes.

(d) The payment of the lost property will be applied as a credit on the current monthly invoice at the time the amount of the allowable credit is agreed upon by the Contracting Officer and the Contractor.

(e) In case of damage to any property which the Contracting Officer and the Contractor agree can be satisfactorily repaired, the Contractor shall repair the property at their own expense in a manner satisfactory to the Contracting Officer.

(End of clause)

52.232-19

Availability of Funds for the Next Fiscal Year (Apr 1984)

Funds are not presently available for performance under this contract beyond September 30, 2008. The Government's obligation for performance of this contract beyond that date is contingent upon the availability of appropriated funds from which payment for contract purposes can be made. No legal liability on the part of the Government for any payment may arise for performance under this contract beyond September 30, 2008, until funds are made available to the Contracting Officer for performance and until the Contractor receives notice of availability, to be confirmed in writing by the Contracting Officer.

(End of clause)

AOC52.233-1

Disputes (Mar 2008)

(a) This contract is subject to the Contract Disputes Act of 1978, as amended (41 U.S.C. 601-613) and as modified by Section 1501 of Title I of Division H of the Consolidated Appropriations Act, 2008, Pub. L. 110-161. (31 U.S.C. 702 NOTE).

(b) Except as provided in the Act, all disputes arising under or relating to this contract shall be resolved under this clause.

(c) "Claim," as used in this clause, means a written demand or written assertion by one of the contracting parties seeking, as a matter of right, the payment of money in a sum certain, the adjustment or interpretation of contract terms, or other relief arising under or relating to this contract. However, a written demand or written assertion by the Contractor seeking the payment of money exceeding $50,000 is not a claim under the Act until certified. A voucher, invoice, or other routine request for payment that is not in dispute when submitted is not a claim under the Act. The submission may be converted to a claim under the Act, by complying with the submission and certification requirements of this clause, if it is disputed either as to liability or amount or is not acted upon in a reasonable time.

(d)(1) A claim by the Contractor shall be made in writing and, unless otherwise stated in this contract, submitted within 6 years after accrual of the claim to the Contracting Officer for a written decision. A claim by the Government against the Contractor shall be subject to a written decision by the Contracting Officer. For the purposes of this clause, all final decisions shall be rendered by the Architect of the Capitol's Director or Deputy Director, Procurement Division.

(2)(i) The Contractor shall provide the certification specified in paragraph (d)(2)(iii) of this clause when submitting any claim exceeding $50,000.

(ii) The certification requirement does not apply to issues in controversy that have not been submitted as all or part of a claim.

(iii) The certification shall state as follows: "I certify that the claim is made in good faith; that the supporting data are accurate and complete to the best of my knowledge and belief; that the amount requested accurately reflects the contract adjustment for which the Contractor believes the Government is liable; and that I am duly authorized to certify the claim on behalf of the Contractor."

(3) The certification may be executed by any person duly authorized to bind the Contractor with respect to the claim.

(e) For Contractor claims of $50,000 or less, the Contracting Officer must, if requested in writing by the Contractor, render a decision within 60 days of the request. For Contractor-certified claims over $50,000, the Contracting Officer must, within 60 days, decide the claim or notify the Contractor of the date by which the decision will be made.

(f) The Contracting Officer s decision shall be final unless the Contractor appeals, within ninety days of receipt of a Contracting Officer s decision, to the Government Accountability Office Contract Appeals Board, 441 G Street NW, Room 7182, Washington, DC 20548; facsimile 202-512-9749 or e-mail CAB@gao.gov.

(g) If the claim by the Contractor is submitted to the Contracting Officer or a claim by the Government is presented to the Contractor, the parties, by mutual consent, may agree to use alternative dispute resolution (ADR). If the Contractor refuses an offer for ADR, the Contractor shall inform the Contracting Officer, in writing, of the Contractor s specific reasons for rejecting the offer.

(h) The Government shall pay interest on the amount found due and unpaid from (1) the date that the Contracting Officer receives the claim (certified, if required); or (2) the date that payment otherwise would be due, if that date is later, until the date of payment. With regard to claims having defective certifications, as defined in FAR 33.201, interest shall be paid from the date that the Contracting Officer initially receives the claim. Simple interest on claims shall be paid at the rate, fixed by the Secretary of the Treasury as provided in the Act, which is applicable to the period during which the Contracting Officer receives the claim and then at the rate applicable for each 6-month period as fixed by the Treasury Secretary during the pendency of the claim.

(i) The Contractor shall proceed diligently with performance of this contract, pending final resolution of any request for relief, claim, appeal, or action arising under or relating to the contract, and comply with any decision of the Contracting Officer.

(End of clause)

Clauses By Reference

Clause	Title	Date
52.202-1	Definitions	07/19/2004
52.203-3	Gratuities	11/08/2006
52.203-5	Covenant Against Contingent Fees	11/08/2006
52.203-6	Restrictions On Subcontractor Sales To The Government	11/08/2006
52.215-2	Audit and Records--Negotiation	11/08/2006

Clause	Title	Date
52.215-8	Order of Precedence--Uniform Contract Format	11/08/2006
52.222-26	Equal Opportunity	03/22/2007
52.222-35	Equal Opportunity For Special Disabled Veterans, Veterans of the Vietnam Era and Other Eligible Veterans	11/08/2006
52.222-36	Affirmative Action For Workers With Disabilities	11/08/2006
52.222-37	Employment Reports On Special Disabled Veterans, Veterans Of The Vietnam Era, and Other Eligible Veterans	11/08/2006
52.222-41	Service Contract Act of 1965 (Nov 2007).	11/07/2007

Section J - List of Attachments

J.1

SECTION J - LIST OF ATTACHMENTS

J.1REQUEST FOR CHECK OF CRIMINAL HISTORY RECORDS
J.2 ACH PAYMENT INFORMATION FORM
J.3 PAST PERFORMANCE QUESTIONNAIRE
J.4 SECTION 028213- ASBESTOS ABATEMENT PROCEDURES
J.5 TUNNEL ACCESS CONTROL POLICY
J.6 REPLACEMENT EQUIPMENT AND MATERIAL SPECIFICATIONS
J.7 PREVENTATIVE MAINTENANCE CHECKLISTS
J.8 SECTION B LABOR CATEGORIES AND UNIT PRICES
J.9 WAGE DETERMINATION NO. 2005-2103, REVISION 4 DATED 7/5/2007
J.10 UNIFORM ASBESTOS MANAGMENT PLAN CPP

Section K - Representations, Certifications and Other Statements of Offerors

52.203-2

Certificate of Independent Price Determination (Apr 1985)

(a) The offeror certifies that--

(1) The prices in this offer have been arrived at independently, without, for the purpose of restricting competition, any consultation, communication, or agreement with any other offeror or competitor relating to--

(i) Those prices;

(ii) The intention to submit an offer; or

(iii) The methods or factors used to calculate the prices offered.

(2) The prices in this offer have not been and will not be knowingly disclosed by the offeror, directly or indirectly, to any other offeror or competitor before bid opening (in the case of a sealed bid solicitation) or contract award (in the case of a negotiated solicitation) unless otherwise required by law; and

(3) No attempt has been made or will be made by the offeror to induce any other concern to submit or not to submit an offer for the purpose of restricting competition.

(b) Each signature on the offer is considered to be a certification by the signatory that the signatory--

(1) Is the person in the offeror's organization responsible for determining the prices being offered in this bid or proposal, and that the signatory has not participated and will not participate in any action contrary to paragraphs (a)(1) through (a)(3) of this provision; or

(2)(i) Has been authorized, in writing, to act as agent for the following principals in certifying that those principals have not participated, and will not participate in any action contrary to paragraphs (a)(1) through (a)(3) of this provision
[insert full name of person(s) in the offeror s organization responsible for determining the prices offered in this bid or proposal, and the title of his or her position in the offeror s organization];

(ii) As an authorized agent, does certify that the principals named in subdivision (b)(2)(i) of this provision have not participated, and will not participate, in any action contrary to paragraphs (a)(1) through (a)(3) of this provision; and

(iii) As an agent, has not personally participated, and will not participate, in any action contrary to paragraphs (a)(1) through (a)(3) of this provision.

(c) If the offeror deletes or modifies paragraph (a)(2) of this provision, the offeror must furnish with its offer a signed statement setting forth in detail the circumstances of the disclosure.

(End of provision)

52.204-3

Taxpayer Identification (Oct 1998)

(a) *Definitions.*

"Common parent," as used in this provision, means that corporate entity that owns or controls an affiliated group of corporations that files its Federal income tax returns on a consolidated basis, and of which the offeror is a member.

"Taxpayer Identification Number (TIN)," as used in this provision, means the number required by the Internal Revenue Service (IRS) to be used by the offeror in reporting income tax and other returns. The TIN may be either a Social Security Number or an Employer Identification Number.

(b) All offerors must submit the information required in paragraphs (d) through (f) of this provision to comply with debt collection requirements of 31 U.S.C. 7701(c) and 3325(d), reporting requirements of 26 U.S.C. 6041, 6041A, and 6050M, and implementing regulations issued by the IRS. If the resulting contract is subject to the payment reporting requirements described in Federal

Acquisition Regulation (FAR) 4.904, the failure or refusal by the offeror to furnish the information may result in a 31 percent reduction of payments otherwise due under the contract.

(c) The TIN may be used by the Government to collect and report on any delinquent amounts arising out of the offeror's relationship with the Government (31 U.S.C. 7701(c)(3)). If the resulting contract is subject to the payment reporting requirements described in FAR 4.904, the TIN provided hereunder may be matched with IRS records to verify the accuracy of the offeror's TIN.

(d) *Taxpayer Identification Number (TIN).*

__TIN: _____.

__TIN has been applied for.

__TIN is not required because:

__Offeror is a nonresident alien, foreign corporation, or foreign partnership that does not have income effectively connected with the conduct of a trade or business in the United States and does not have an office or place of business or a fiscal paying agent in the United States;

__Offeror is an agency or instrumentality of a foreign government;

__Offeror is an agency or instrumentality of the Federal Government.

(e) *Type of organization.*

__Sole proprietorship;

__Partnership;

__Corporate entity (not tax-exempt);

__Corporate entity (tax-exempt);

__Government entity (Federal, State, or local);

__Foreign government;

__International organization per 26 CFR 1.6049-4;

__Other _____.

(f) *Common parent.*

__Offeror is not owned or controlled by a common parent as defined in paragraph (a) of this provision.

__Name and TIN of common parent:

Name _____.

TIN _____.

(End of provision)

52.209-5

Certification Regarding Debarment, Suspension, Proposed Debarment, and Other Responsibility Matters (Dec 2001)

(a)(1) The Offeror certifies, to the best of its knowledge and belief, that--

(i) The Offeror and/or any of its Principals--

(A) Are __ are not __ presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency;

(B) Have __ have not __, within a three-year period preceding this offer, been convicted of or had a civil judgment rendered against

them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, state, or local) contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property; and

(C) Are __ are not __ presently indicted for, or otherwise criminally or civilly charged by a governmental entity with, commission of any of the offenses enumerated in paragraph (a)(1)(i)(B) of this provision.

(ii) The Offeror has __ has not __, within a three-year period preceding this offer, had one or more contracts terminated for default by any Federal agency.

(2) "Principals," for the purposes of this certification, means officers; directors; owners; partners; and, persons having primary management or supervisory responsibilities within a business entity (*e.g.*, general manager; plant manager; head of a subsidiary, division, or business segment, and similar positions).

This Certification Concerns a Matter Within the Jurisdiction of an Agency of the United States and the Making of a False, Fictitious, or Fraudulent Certification May Render the Maker Subject to Prosecution Under Section 1001, Title 18, United States Code.

(b) The Offeror shall provide immediate written notice to the Contracting Officer if, at any time prior to contract award, the Offeror learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

(c) A certification that any of the items in paragraph (a) of this provision exists will not necessarily result in withholding of an award under this solicitation. However, the certification will be considered in connection with a determination of the Offeror's responsibility. Failure of the Offeror to furnish a certification or provide such additional information as requested by the Contracting Officer may render the Offeror nonresponsible.

(d) Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by paragraph (a) of this provision. The knowledge and information of an Offeror is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

(e) The certification in paragraph (a) of this provision is a material representation of fact upon which reliance was placed when making award. If it is later determined that the Offeror knowingly rendered an erroneous certification, in addition to other remedies available to the Government, the Contracting Officer may terminate the contract resulting from this solicitation for default.

(End of provision)

52.223-1

Biobased Product Certification (Dec 2007)

As required by the Farm Security and Rural Investment Act of 2002 and the Energy Policy Act of 2005 (7 U.S.C. 8102(c)(3)), the offeror certifies, by signing this offer, that biobased products (within categories of products listed by the United States Department of Agriculture in 7 CFR part 2902, subpart B) to be used or delivered in the performance of the contract, other than biobased products that are not purchased by the offeror as a direct result of this contract, will comply with the applicable specifications or other contractual requirements.

(End of provision)

AOC52.204-2

Data Universal Numbering System (Duns) Number (Jun 2004)

(a) The offeror shall enter, in the space provided below, the DUNS number that identifies the offeror s name and address exactly as stated in the offer. The DUNS number is a nine-digit number assigned by Dun and Bradstreet Information Services.

(b) If the offeror does not have a DUNS number, it should contract Dun and Bradstreet directly to obtain one. A DUNS number will be provided immediately by telephone at no charge to the offeror. For information on obtaining a DUNS number, the offeror, if located within the United States, should call Dun and Bradstreet at 1-800-333-0505. The offeror should be prepared to provide the following information:

(1) Company name,

(2) Company address;

(3) Company telephone number;

(4) Line of business;

(5) Chief executive officer/key manager;

(6) Date the company was started;

(7) Number of people employed by the company; and

(8) Company affiliation.

(c) Offerors located outside the United States may obtain the location and phone number of the local Dun and Bradstreet Information Services office from the Internet home page at http://www.customerservice@dnb.com. If an offeror is unable to locate a local service center, it may send an e-mail to Dun and Bradstreet at globalinfo@mail.dnb.com.

(d) Enter DUNS number:_____.

(End of provision)

AOC52.204-3

Representations and Certifications (Nov 2004)

The offeror shall properly execute and submit with its offer the Representations and Certifications contained herein. Insert information in spaces provided as applicable.

(End of provision)

AOC52.215-8

Authorized Negotiators (Jun 2004)

The offeror represents that following persons are authorized to negotiate on its behalf with the Government in connection with this Request for Proposal:

Name: _____ Title: _____

Telephone: _____ E-Mail: _____

Name: _____ Title: _____

Telephone: _____ E-Mail: _____

Name: _____ Title: _____

Telephone: _____ E-Mail: _____

(End of provision)

AOC52.219-2

Small Business Representations and Certifications (Nov 2007)

(a) If this procurement exceeds $100,000 the North American Industry Classification System (NAICS) code for this procurement is _____ and the small business size standard is _____ (if this requirement is for manufacturing or trade) or $ _____ (if this requirement is for services, including construction).

(b) The Architect of the Capitol maintains information on the types of contractors to whom contract and order awards are made in order to monitor the success of our efforts to improve contracting opportunities in the small business community. Therefore, each offeror shall complete the information regarding the classification of its type of entity.

(c) Definitions. As used in this provision --
"Small business" means a business concern that is organized for profit, has a place of business in the United States, and does not

exceed the size standard for its industry. It may be a sole proprietorship, partnership, corporation, or any other legal entity.
"Service-disabled veteran-owned small business concern" means a small business concern (1) not less than 51 percent of which is owned by one or more service-disabled veterans or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more service-disabled veterans; and (2) the management and daily business operations of which are controlled by one or more service-disabled veterans or, in the case of a service-disabled veteran with permanent and severe disability, the spouse or permanent caregiver of such veteran.
"Veteran-owned small business concern" means a small business concern (1) not less than 51 percent of which is owned by one or more veterans (as defined at 38 U.S.C. 101(2)) or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more veterans; and (2) the management and daily business operations of which are controlled by one or more veterans.
"Women-owned small business concern" means a small business concern (1) that is at least 51 percent owned by one or more women or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and (2) whose management and daily business operations are controlled by one or more women.
"Large business concern" is an entity that is organized for profit, has a place of business in the United States, and exceeds the size standard for its industry.
"Nonprofit organization" is an entity that is not organized for profit, e.g., the American Red Cross, universities, and foundations.
"Foreign contractor" is an entity organized for profit that is not in the United States.

(d) Small disadvantaged business, women-owned small business, veteran-owned small business, service-disabled veteran-owned small business, and HUBZone small business concerns are subcategories of small business. Small disadvanted business and HUBZone small business concerns require certification by the U.S. Small Business Administration. Additional information is available at http://www.sba.gov.

(e) For entities organized for profit, the size standards for each industry can be found at http://www.sba.gov/gopher/Government-Contracting/Size/. A business is large if the number of employees or revenue amount exceeds that shown in the applicable industry.

(f) Indicate below the information that best describes your organization and check all categories that apply. For example, if your organization is women-owned and veteran-owned small business, then check "Small Business", Women-owned small business", and "Veteran-owned small business".

_____ Nonprofit organization (do not check any other box).
_____ Large business (do not check any other box).
_____ Foreign contractor (do not check any other box).
_____ State/local/Federal government agency (do not check any other box).
_____ Small business (see 13 CFR Part 121).
_____ HUBZone small business (see 13 CFR Part 126).
_____ Small disadvantaged business (see 13 CFR 124.1002).
_____ Service-disabled veteran-owned small business (see 38 U.S.C. 101(2) and 38 U.S.C. 101(16)).
_____ Veteran-owned small business (see 38 U.S.C. 101(2)).
_____ Women-owned small business.

(End of provision).

Section L - Instructions, Conditions and Notices to Offerors

L.1

L.1 INSTRUCTIONS FOR PREPARING THE TECHNICAL PROPOSAL (AOC) (NOV 1999)

.1 The Technical Proposal shall be organized in accordance with the following format to facilitate evaluation by the Government. The Technical Proposal shall be subdivided into five subsections: Quality Control, Corporate Experience General Contractor/Major Subcontractor, Key Personnel, and Past Performance; indexed by evaluation factor and contained in three ring binders, binder clips, rings, or other methods that allow the material to be viewed and removed easily. Spiral binding is strongly discouraged.

.1 Factor 1 Quality Control.

.1 The Offeror shall discuss in outline form the quality control procedures in place which address Welding Procedure Specifications (WPS) and Procedure Qualification Records (PQR) for each type of repair. Please also include a Plan of Accomplishment to include a saftey plan as well as a quality control plan.

.2 Factor 2 - Corporate Experience (General Contractor/Major Subcontractor).

.1 Provide descriptions of three (3) current or recently completed contracts performed by the offeror, and any proposed major subcontractors (if any), from within the past three years, which shall include descriptions of successfully managed contracts for at least three (3) comparable projects (Services for preventative maintenance and repairs). Discuss your experience with your proposed subcontractors and related projects, point of contact, and phone numbers. Each project to include General Contractor and information for Major Subcontractors and shall include at a minimum the following information:

.1 a project identification, location;
.2 contracting agency/owner identification and address;
.3 date of award and completion;
.4 contract award amount/final amount and description of any differences
between the award amount and the final amount;
.5 subcontractors involved;
.6 brief description of the project; and
.7 point of contract at agency/owner and phone number.

.2 Comparable projects are those which are similar in size, scope and complexity to the work contemplated by this solicitation.

.3 Factor 3 - Key Personnel (Project Manager and Field Technicians).

.1 The Offeror shall provide resumes for the key personnel. Resumes shall document recent and relevant experience, to include training (within the past three years), shall be a maximum of two pages, include beginning and ending month and year for each job, and include the following information:

.1 A list of projects and the level of involvement,
.2 A list of five references who can provide appropriate feedback about the quality of performance and technical capabilities. Include a contact name, company, address and current telephone and fax numbers.
.3 Position and years with the Offeror.

.4 Factor 4 - Past Performance (General Contractor/Major Subcontractors).

.1 Although the Government reserves the right to use any source of information available on the Offeror s past performance to either evaluate past performance or verify information provided by the Offeror, the Offeror shall provide information that demonstrates the offeror s past performance. The enclosed AOC PAST PERFORMANCE QUESTIONNAIRE shall be provided to each of the companies/agencies submitted by the offeror in response to Evaluation Factor 2. The questionnaire(s) must be faxed by the companies/agencies to the attention of Chris Lindsay at (866) 221-4147 by the date established for receipt of offers in order to be considered in the evaluation process. A neutral will be applied for those projects/contracts for which a questionnaire is not received.

52.216-1

Type of Contract (Apr 1984)

The Government contemplates award of a Indefinite Delivery/Indefinite Quantity Firm Fixed Price with Work Orders contract resulting from this solicitation.

(End of provision)

AOC52.215-6

Preparation of Proposals (May 2007)

(a) Offerors are expected to examine the drawings, if any, specifications, Schedule, and all instructions. Failure to do so will be at the Offerors risk.

(b) Each offeror shall furnish the information required by the solicitation. The offerors shall sign the offer on Page 1 (SOLICITATION, OFFER AND AWARD) in block 18 and return Sections A, B, and K of this solicitation package. Erasures or other changes must be initialed by the person signing the offer. Offers signed by an agent shall be accompanied by evidence of that agent's authority, unless that evidence has been previously furnished to the issuing office.

(c) For each item offered, offers shall

(1) Show the unit price, if required, including, unless otherwise specified, packaging, packing, and preservation; and

(2) Enter the extended price for the quantity of each item offer in the "Amount" column of the Schedule.

(d) In case of discrepancy between a unit price and an extended price, the unit price will be presumed to be correct, subject, however, to correction to the same extent and in the same manner as any other mistake.

(e) Offers for supplies or services other than those specified will not be considered unless authorized by the solicitation.

(End of provision)

AOC52.215-9

Failure to Submit Offer (Jun 2004)

Recipients of this solicitation not responding with a proposal should not return this solicitation, unless it specifies otherwise. Instead, they should advise the issuing office by letter, postcard, or established electronic commerce methods, whether they want to receive future solicitations for similar requirements. If a recipient does not submit a proposal and does not notify the issuing office that future solicitations are desired, the recipient s name will be removed from the applicable mailing list.

(End of provision)

AOC52.215-2

Interpretations and Amendments (Jun 2004)

(a) Any prospective offeror desiring an explanation or interpretation of the solicitation, drawings, specifications, etc., must request it in writing no later than fourteen calendar days prior to the date established for receipt of offers. Oral explanations or instructions given before the award of a contract will not be binding.

(b) Prospective offerors shall request the Contracting Officer, in writing, via FAX or e-mail for an interpretation or correction of any ambiguity, inconsistency, or error in the contract documents which they may discover or which should have been discovered by a reasonably prudent offeror. Such requests or objections to materials or methods of construction shown or specified shall be directed to the attention of the Contracting Officer at least fifteen (15) calendar days prior to the date specified for receipt of proposals. Written requests shall be transmitted via e-mail to clindsay@aoc.gov or via facsimile to (866) 221-4147.

(c) Any interpretations or corrections, as well as any additional modifications the Contracting Officer may desire to include, will be in the form of amendments, in writing, which will be sent on the same date to all offerors if that information is necessary in submitting offers or if the lack of it would be prejudicial to other prospective offerors and shall become a part of any subsequent contract. The Contracting Officer reserves the right to answer only such questions as have, in his opinion, a definite bearing upon the proposals to be submitted.

(1) Offerors shall acknowledge the receipt of all amendments to the solicitation by:

(i) Signing and returning the amendment;

(ii) Identifying the amendment number and date in the space provided for this purpose on the form for submitting a offer;

(iii) Letter or telegram; or

(iv) Facsimile, if facsimile offers are authorized in the solicitation.

(2) The Government must receive the acknowledgment by the time and at the place specified for receipt of offers.

(d) Requests for oral interpretations or any other interpretations not made by amendments will not be accepted, and any information that may possibly be gained by offerors in that manner is gratuitous and not binding.

(e) If this solicitation is amended, all terms and conditions that are not amended remain unchanged.

(End of provision)

AOC52.215-1

Instructions to Offerors (Jul 2007)

(a) Definitions. As used in this provision --

Proposal modification is a change made to a proposal before the solicitation s closing date and time, or made in response to an amendment, or made to correct a mistake at any time before award.

Proposal revision is a change to a proposal made after the solicitation closing date, at the request of or as allowed by a Contracting Officer as the result of negotiations.

Time, if stated as a number of days, is calculated using calendar days, unless otherwise specified, and will include Saturdays, Sundays, and legal holidays, including Presidential Inauguration Day. However, if the last day falls on a Saturday, Sunday, or legal holiday, including Presidential Inauguration Day, then the period shall include the next working day.

(b) Offerors are expected to examine the entire solicitation and all instructions. Failure to do so will be at the offeror s risk. Each offeror shall furnish the information required by the solicitation. The offeror will be held responsible for full knowledge of all information contained therein.

(c) Packaging, transmission, and tracking of proposals. (1) Proposals, modifications, and revisions shall be enclosed, in the quantities specified elsewhere in this solicitation, in sealed envelopes. With each copy of the form entitled, "SOLICITATION, OFFER, AND AWARD", the offeror shall enclose the completed Schedule page; offer guarantee, if required; and Representations and Certifications. Address envelopes to: Architect of the Capitol, Procurement Division, Ford House Office Building, Attn: Mr. Christian Lindsay, Room H2-263 Bid Room, Second and D Streets, S.W., Washington, DC 20515. Offeror shall write Bid Documents Enclosed, H2-263 Bid Room, and write the solicitation number, time and date for receipt of offers on the exterior of the package on the same side as the address. Telegraphic or facsimile proposals and modifications will not be considered.

(2) Current security requirements established by the U.S. Capitol Police to screen mail being delivered to the U.S. Capitol Complex of buildings preclude the use of U. S. Postal Service by offerors to deliver their proposals submitted in response to this solicitation. In addition, because all packages must be screened for security purposes at a central location prior to their delivery, the Architect of the Capitol cannot accept packages containing offers hand carried directly to the Bid Room address within the Ford House Office Building, or any other location in the U.S. Capitol Complex of buildings. See Notice for Delivery on the front of the solicitation.

(3) To assist in tracking of proposals, offerors are requested to fax a copy of their signed Solicitation, Offer and Award form as well as a copy of the FEDEX or UPS receipt to Mr. Christian Lindsay to (866) 221-4147 at the time of the issuance of their proposal.

(4) The only acceptable method by which offerors can deliver their responses to this solicitation shall be via Federal Express (FEDEX) or United Parcel Service (UPS). Offers submitted via any other method will be rejected. OFFERORS - DO NOT MAIL YOUR OFFER BY REGULAR U.S. MAIL. See notice attached to this solicitation for special instructions.

(d) Submission, modification, revision, and withdrawal of proposals. (1) Offerors are responsible for submitting proposals and any modifications or revisions so as to reach the Government office designated in the solicitation by the time specified in the solicitation. If no time is specified in the solicitation, the time for receipt is 4:30 p.m. local time, for the designated Government office on the date that the proposal or revision is due.

(2) Any proposal, modification, or revision received at the Government office designated in the solicitation after the exact time specified for receipt of offers is late and will not be considered unless it is received before award is made, the Contracting Officer determines that accepting the late offer would no unduly delay the acquisition, and-

(i) If it was transmitted through an electronic commerce method authorized by the solicitation, it was received at the initial point of entry to the Government infrastructure not later than 5:00 p.m. one working day prior to the date specified for receipt of proposals;

(ii) There is acceptable evidence to establish that it was received at the Government installation designated for receipt of proposals and was under the Government s control prior to the time set for receipt of proposals; or

(iii) It is the only proposal received.

(3) However, a late modification of an otherwise successful proposal that makes its terms more favorable to the Government, will be considered at any time it is received and may be accepted.

(4) Acceptable evidence to establish the date of receipt at the Government installation includes the time/date stamp of that installation on the offer wrapper, other documentary evidence of receipt maintained by the installation, or oral testimony or statements of Government personnel.

(5) If an emergency or unanticipated event interrupts normal Government processes so that offers cannot be received at the Government office designated for receipt of proposals by the exact time specified in the solicitation and urgent Government requirements preclude amendment of the solicitation, the time specified for receipt of proposals will be deemed to be extended to the same time of day specified in the solicitation on the first work day on which normal Government processes resume.

(6) Proposals may be withdrawn by written notice received at any time before award. Proposals may be withdrawn in person by an offeror or an authorized representative if the identity of the person requesting withdrawal is established and the person signs a receipt for the proposal before award.

(End of provision)

AOC52.215-3

Restriction on Disclosure and Use of Data (Jun 2004)

Offerors that include in their proposals data that they do not want disclosed to the public for any purpose, or used by the Government except for evaluation purposes, shall

(a) Mark the title page with the following legend:
This proposal includes data that shall not be disclosed outside the Government and shall not be duplicated, used, or disclosed--in whole or in part--for any purpose other than to evaluate this proposal. If, however, a contract is awarded to this offeror as a result of--or in connection with--the submission of this data, the Government shall have the right to duplicate, use, or disclose the data to the extent provided in the resulting contract. This restriction does not limit the Government s right to use information contained in this data if it is obtained from another source without restriction. The data subject to this restriction are contained in sheets (insert numbers or other identification of sheets) ; and

(b) Mark each sheet of data it wishes to restrict with the following legend:
Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this proposal.

(End of provision)

L.2

INSTRUCTIONS FOR PREPARING THE PRICE PROPOSAL (AOC)(JUN 2003)

.1 A firm fixed-price shall be entered by each offeror on the Schedule page for each line item (line item pricing, options and unit prices) which shall represent the cost for performing the work required by this request for Proposal and Attachment J.6 pages 3 through 22. The Architect reserves the right to request from each offeror information regarding the breakdown of all costs that are included in the lump sum price (Line Item Nos. 001 through 010, inclusive), to include copies of all work sheets used in forming the proposed pricing. Erasures or other changes on any or all submissions shall be initialed by the signer of the proposal or by his duly authorized agent.

.2 In addition, the Representations and Certifications, with applicable information included in the spaces provided shall be included as a part of the Price Proposal.

.3 The Price Proposal will be submitted with the required documents in the following order:
.1 The SOLICITATION, OFFER, AND AWARD FORM (original signature required in Block 15);
.2 Section B - The SCHEDULE pages Attachment J.6 pages 3 through 22; and
.3 Section K - The REPRESENTATIONS AND CERTIFICATIONS .

AOC52.237-1

AOC52.237-1 Site Visit (Aug 2005)

(a) Offerors are urged and expected to inspect the site where services are to be performed and to satisfy themselves regarding all general and local conditions that may affect the cost of contract performance, to the extent that the information is reasonably obtainable. In no event shall failure to inspect the site constitute grounds for a claim after contract award.

(b) Appointments for visiting the locations specified herein can be made by contacting Mr. Christian Lindsay at (202) 226-2172.

(End of provision)

Section M - Evaluation Factors for Award

AOC52.215-5

Contract Award - Source Selection Procedures (Jun 2004)

(a) The Government will award a contract resulting from this solicitation to the responsible offeror whose offer conforming to the solicitation will be most advantageous to the Government, cost or price and other factors, specified elsewhere in this solicitation, considered.

(b) The Government may

(1) Reject any or all offers if such action is in the public interest;

(2) Accept other than the lowest offer; and

(3) Waive informalities and minor irregularities in offers received.

(c) The Government intends to evaluate proposals and award a contract without discussions with offerors (except clarifications as described in FAR 15.306(a)). Therefore, the offeror s initial proposal should contain the offeror s best terms from a price and technical standpoint. The Government reserves the right to conduct discussions if the Contracting Officer later determines them to be necessary. If the Contracting Officer determines that the number of proposals that would otherwise be in the competitive range exceeds the number at which an efficient competition can be conducted, the Contracting Officer may limit the number of proposals in the competitive range to the greatest number that will permit an efficient competition among the most highly rated proposals.

(d) The Government may accept any item or combination of items, unless doing so is precluded by a restrictive limitation in the solicitation or the offer.

(e) A written award or acceptance of offer mailed or otherwise furnished to the successful offeror within the time for acceptance specified in the offer shall result in a binding contract without further action by either party. Before the offer's specified expiration time, the Government may accept an offer (or part of an offer as provided in Paragraph (d) of this provision), whether or not there are negotiations after its receipt, unless a written notice of withdrawal is received before award. Negotiations conducted after receipt of an offer do not constitute a rejection or counteroffer by the Government.

(f) Neither financial data submitted with an offer, nor representations concerning facilities or financing, will form a part of the resulting contract. However, if the resulting contract contains a clause providing for price reduction for defective cost or pricing data, the contract price will be subject to reduction if cost or pricing data furnished is incomplete, inaccurate, or not current.

(g) The Government may determine that an offer is unacceptable if the prices proposed are materially unbalanced between line items or sub line items. Unbalanced pricing exists when, despite an acceptable total evaluated price, the price of one or more contract line items is significantly overstated or understated as indicated by the application of cost or price analysis techniques. A proposal may be rejected if the Contracting Officer determines that the lack of balance poses an unacceptable risk to the Government.

(End of provision)

M.1

SECTION M

EVALUATION FACTORS FOR AWARD

M.1 PROPOSAL EVALUATION CRITERIA (AOC) (JUN 2003)

.1 The evaluation criteria to be used by the Contracting Officer for the selection of a contractor to perform the work specified are defined below. The criteria are divided into technical and price categories which consist of subsections corresponding to those in the article entitled INSTRUCTIONS FOR PREPARING THE TECHNICAL PROPOSAL and the article entitled INSTRUCTIONS FOR PREPARING THE PRICE PROPOSAL in Section L. The technical criteria are considered by the Architect to be generally more important

than price criteria. However, as the difference in technical merit between the proposals becomes less significant, the relative importance of the price will increase.

.2 TECHNICAL CRITERIA. Each offeror s proposal will be evaluated in accordance with the technical criteria listed below to determine whether it is responsive to the requirements of the RFP and are therefore acceptable. Technical criteria are listed below in descending order of importance:

.1 Factor 1 Quality Control -

1. The Offeror s Quality Control will be evaluated to determine if the procedures which address Welding Procedure Specifications and Procedure Qualification Records for each repair will fulfill the requirements and objectives under this solicitation. As well as How their Plan of Accomplishment will fullfill the requirements under this solicitation.

.2 Factor 2 - Corporate Experience (General Contractor/Major Subcontractor). -

1. The Offeror s and the proposed subcontractors experience will be evaluated to determine the extent of successful completion of projects, performed within the past three years, with a minimum of three successfully completed projects of similar scope, size and complexity to the requirements of this project (Services for preventative maintenance and repairs).

2. The experience with the subcontractors and related projects will be evaluated for the extent of successful completion of projects, performed within the past three years, of similar scope, size and complexity to the requirements of this project (Services for preventative maintenance and repairs).

.3 Factor 3 - Key Personnel (Project Manager and Field Technicians) -

1. The Government will evaluate the qualifications and experience on the resumes of the Offeror s key personnel, including Project Manager and field technicians.

2. The purpose of the key personnel information is to evaluate the Offeror s ability to provide quality personnel who have the necessary qualifications and experience, in terms of training, background, and recent technical experience, to successfully perform the requirements of this solicitation.

.4 Factor 4 - Past Performance (General Contractor/Major Subcontractors) -

1. The Offeror s and the proposed subcontractors past performance will be evaluated to determine the extent of successful completion of projects, performed within the past three years, of similar scope, size and complexity to the requirements of this project (Services for preventive maintenance and repairs).

2. The AOC will use references provided (Past Performance Questionnaire) in this factor to verify the offeror s and proposed subcontractors past performance relative to conforming to contract requirements, meeting prescribed schedules, and history of reasonable and cooperative behavior. Timeliness and degree of client satisfaction for each project will be taken into consideration. Proposed subcontractors will be evaluated to determine if their qualifications are sufficient to carry out their portion of the work as described in the specification. The AOC may use other references/information to verify past performance.

.3 PRICE CRITERIA. The Government will evaluate the price proposals of all firms found technically qualified. Price criterion measure not only actual dollars but also analyze reasonableness of the Offeror s proposed price and its position in the range of all prices.

52.252-1 Sec. M

52.252-1 SOLICITATION PROVISIONS INCORPORATED BY REFERENCE (FEB 1998)

This solicitation incorporates one or more solicitation provisions by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. The offeror is cautioned that the listed provisions may include blocks that must be completed by the offeror and submitted with its quotation or offer. In lieu of submitting the full text of those provisions, the offeror may identify the provision by paragraph identifier and provide the appropriate information with its quotation or offer. Also, the full text of a solicitation provision may be accessed electronically at this/these address(es):

www.gsa.gov or www.arnet.gov

(End of provision)

Clauses By Reference

Clause	Title	Date
52.217-5	Evaluation Of Options	11/08/2006

For AOC use only:
ID required _____
No ID _____

CP–491
(4–96)

UNITED STATES CAPITOL POLICE
WASHINGTON, D.C. 20510-7218

REQUEST FOR CHECK OF CRIMINAL HISTORY RECORDS

Please report with: (1) a form of valid photo identification and (2) this form; to the Identification Section, Room 103B, U.S. Capitol Police Headquarters, 119 D Street, N.E.

1 Name *(Last, First, Middle)*	Address: _____ Street & No. _____ City & State _____ Zip _____ Tele:

2 Other names ever used *(e.g. maiden name, nickname, etc.)*

3 Date of Birth *(Month, Day, Year)*			4 Birthplace *(City and State or County)*	
5 Social Security Number			6 Sex ☐ Male ☐ Female	
7 Race	8 Height	9 Weight	10 Eye Color	11 Hair Color

SIGNATURE AND RELEASE OF INFORMATION:

READ THE FOLLOWING CAREFULLY BEFORE YOU SIGN:

- I understand that the information provided above will be used to check the criminal history records of the Federal Bureau of Investigation (FBI).
- I consent to the use of the information provided above in making a security determination concerning me.
- I certify that, to the best of my knowledge and belief, all the information provided above is true, correct, and complete, and made in good faith.

12 Signature _____

13 Date Signed *(Month, Day, Year)* _____

AUTHORIZED REQUESTER:

14 Name/Employing Office

15 Title

16 Telephone number	**17** Date of Request

SIGNATURE AND REQUEST:

I request that the applicant/employee indicated above be fingerprinted by the United States Capitol Police and that these fingerprints be submitted for a check of the criminal history records of the Federal Bureau of Investigation (FBI). This check will be used in making a security determination concerning this applicant/employee.

18 Signature

19 Date Signed *(Month, Day, Year)*

IDENTIFICATION SECTION:

20 Individual Receiving Request

21 Date/Time Received

22 IS #:

**** NOTICE ****

TO: ALL VENDORS/CONTRACTORS/CONSULTANTS

FROM: THE OFFICE OF THE ARCHITECT OF THE CAPITOL

Due to requirements set forth in the DEBT COLLECTION IMPROVEMENT ACT OF 1996 (PUBLIC LAW 104-134), all payments made to vendors, contractors and consultants doing business with the Federal Government must be made by Electronic Funds Transfer (EFT) directly to your financial institution. If you are currently enrolled under EFT with the Architect of the Capitol, no further action is necessary other than to report changes.

EFT payments are cost effective, enabling prompt, convenient and reliable payments directly to a designated bank account.

The Architect of the Capitol, in making EFT payments, supplies the financial institution with identifying information (ie. invoice number), which accompanies each transaction. The financial institution in turn can supply this information to the account holder.

Therefore, to accomplish the mandate of P. L. 104-134, it is necessary that the attached sheet; PAYMENT INFORMATION FORM ACH VENDOR PAYMENT SYSTEM be completed and returned with your bid or offer as set forth in Section G of the solicitation.

PAYMENT INFORMATION FORM
ACH VENDOR PAYMENT SYSTEM

This form is used for ACH payments with an addendum record that carries payment-related information. Recipients of these payments should bring this information to the attention of their financial institution when presenting this form for completion. The information will be transmitted in the CCD+ format to the designated financial institution.

Debt Collection Improvement Act of 1996

PAPERWORK REDUCTION ACT STATEMENT

The information being collected on this form is pursuant to Public Law 104-134, which mandated Electronic Funds Transfer for recipients of all federal payments (excluding IRS tax refunds) beginning July 24, 1996. This information will be needed by the Treasury Department to transmit payments and related data.

COMPANY INFORMATION	
NAME:	
ADDRESS:	
CONTRACT NUMBER: **AOC-**_____	TAXPAYER IDENTIFICATION NUMBER (TIN):
CONTACT PERSON NAME:	TELEPHONE NUMBER: ( ) FAX NUMBER: ( )

AGENCY INFORMATION	
NAME: ARCHITECT OF THE CAPITOL - FORD HOUSE OFFICE BUILDING	
ADDRESS: ACCOUNTING DIVISION, ROOM H2-205	
WASHINGTON, D.C. 20024	FAX NUMBER: (202) 225-7321
CONTACT PERSON NAME: MR. JAMES JARBOE	TELEPHONE NUMBER: (202) 226-2552

FINANCIAL INSTITUTION INFORMATION	
BANK NAME:	
BRANCH LOCATION: (If applicable)	
CONTACT NAME:	TELEPHONE NUMBER: ( )
NINE DIGIT ROUTING TRANSIT NUMBER: ___ ___ ___ ___ ___ ___ ___ ___ ___	
DEPOSITOR ACCOUNT NUMBER:	
TYPE OF ACCOUNT: _____ CHECKING _____ SAVINGS _____LOCKBOX	
SIGNATURE AND TITLE OF REPRESENTATIVE:	TELEPHONE NUMBER:

AOC PAST PERFORMANCE QUESTIONNAIRE
RFP No. 080016

OPERATION AND MAINTENANCE OF THE UTILITY DISTRIBUTION SYSTEM, U.S. CAPITOL POWER PLANT, WASHINGTON, D.C.

The company listed below is preparing an offer on the above project for the Architect of the Capitol, Washington, DC. Your name has been provided as a customer reference regarding performance under a past contract with your agency/company. Your comments are considered Source Selection Sensitive, therefore, you are advised that your response will be safeguarded to the extent cited in the Federal Acquisition Regulation (FAR) 42.1503. FAR prohibits the release of past performance evaluations to other than other Government personnel and the company whose performance is being evaluated during the period the information may be used to provide source selection information.

This past performance questionnaire is being submitted by the contractor and you are requested complete it and return it to the Architect of the Capitol in care of Chris Lindsay at FAX number (866) 221-4147 on or before the proposal submission due date of **JUNE 24, 2008.** While all elements below may not apply, please complete as much as possible.

Company/Individual Requesting Past Project Information:

Name:_____

Past Project Title On Which The Company Is Being Evaluated

Project Title :_____

Evaluator POC (for verification purposes)

Name: Agency/Company, POC _____Date:

Phone No.:_____ Fax No. _____

E-mail Address:

Address:_____

Position held or function in relation to project: _____

Ratings: Please evaluate the contractor's performance using the following ratings:

"O" Outstanding The contractor's performance clearly exceeded the contract requirements.

AOC PAST PERFORMANCE QUESTIONNAIRE
RFP No. 080016

"S" Satisfactory	The contractor's performance met the contract requirements.
"M" Marginal	The contractor's performance met the minimum contract requirements but with difficulty.
"U" Unsatisfactory	The contractor's performance was poor and/or did not satisfy contract requirements.

Please rate and provide supporting information for the following. If the rating is Outstanding or Unsatisfactory, please provide specific contract/job performance areas which were exceeded or not performed in accordance with the contract's minimum requirements. (Use additional sheets as needed)

1. Performance in meeting delivery/completion schedules: _____

_____ **Rating:** _____

2. What did the contractor do to improve or resolve schedule problems, if any?

_____ **Rating:** _____

3. The contractor's quality control (CQC). _____

_____ **Rating:** _____

4. The contractor's performance in delivering quality work in accordance with the contract:

_____

Rating:

5. The contractor's ability to provide the required work at a reasonable total price. _____

_____ **Rating:** _____

6. The contractor's compliance with labor standards, if applicable. _____

_____ **Rating:** _____

7. The contractor's compliance with safety standards. _____

_____ **Rating:** _____

8. Has the contractor been given any of the following: Cure notice, show cause, letters of reprimand, suspension of payments, termination? If yes, please explain. _____

_____ **Rating:** _____

AOC PAST PERFORMANCE QUESTIONNAIRE
RFP No. 080016

9. Would you award another contract to this contractor? If no, please state reasons for not recommending this contractor additional work. _____

_____ **Rating:** _____

10. Was the customer satisfied with the end product? _____

_____ **Rating:** _____

11. The relationship between the contractor and owner's contract team/Contracting Officer/COR/COTR?

_____ **Rating:** _____

12. The contractor's on-site management and coordination of subcontractors.

_____

_____ **Rating:** _____

13. The contractor's overall corporate management, integrity, reasonableness and cooperative conduct.

_____

_____ Rating: _____

14. Has the contractor filed any modifications?_____ How many? _____
And to what extent? _____

15. Has the contractor been provided an opportunity to discuss any negative performance ratings?

If so, what were the results? _____

16. **OVERALL RATING** **Rating:** _____

17. Please provide any additional comments:_____

_____

_____

_____

AOC PAST PERFORMANCE QUESTIONNAIRE
RFP No. 080016

_____

_____

_____

SECTION 028213 - ASBESTOS ABATEMENT PROCEDURES

PART 1 - GENERAL

1.1 DESCRIPTION OF WORK:

A. **General:** This section includes required procedures necessary to reduce air concentrations of asbestos to the specified level and maintain the specified asbestos control limits that is mandated during the life of the contract. It also includes procedures for the encapsulation, removal, containment, and disposal of asbestos containing materials.

1. **Work Area:** The work areas include the following:

LIST AREAS TO BE ABATED.

2. **The following asbestos** containing materials are to be removed:

a. Removal and disposal of all asbestos insulation within the work area.
b. The work shall be performed within a negative air containment.
c. All measurements are approximate and are to be verified by the contractor.

1.2 QUALITY ASSURANCE:

A. **Definitive Responsibility Criteria:**

1. **Qualifications For the Asbestos Abatement Contractor:**

a. **Asbestos Abatement Experience:** Provide the name and location of at least five (5) prior asbestos abatement projects, successfully performed by the selected Asbestos Abatement Contractor, that are comparable in scope of work, structure, project costs and in complexity. For each project include the name and current telephone number of the project's contract representative. Address how each project is comparable in scope of work, structure, project costs and complexity.
b. **Project Documents:** Provide copies of the daily logs and air monitoring reports including final clearance sample results, for the five abatement projects submitted in response to the preceding paragraph.
c. **Pollution Liability Insurance:** Submit proof of Pollution Liability Insurance coverage. If the completion date of the bid project is beyond the effective dates of the Pollution Liability Insurance coverage, then the selected contractor shall submit a statement stating it is understood, that this Pollution Liability Insurance coverage, shall remain in effect throughout the duration of this contract.
d. **Federal/State EPA and OSHA citations**: Provide a list all federal and State EPA or OSHA citations the Contractor has received in the last five (5) years.

2. **Qualifications for the Supervisor / Competent Person:** Provide the name and experience record of the proposed Supervisor/Competent Person and foreman, the selected Asbestos Abatement Contractor, will assign to this project. Provide evidence that the proposed Supervisor/Competent Person has supervised at least five (5) asbestos abatement contracts of comparable scope and complexity.

    a. **Accreditation:** Provide evidence that shows the proposed Supervisor/Competent Person, is accredited as an asbestos Contractor/Supervisor as described in 40 CFR Part 763 (EPA's Model Accreditation Plan).

3. **Qualifications for the Certified Industrial Hygienist (CIH):** Provide the name and experience record of the CIH selected to perform the duties outlined in "Project Certified Industrial Hygienist" below. Provide evidence showing that, in the last five years, the selected CIH has performed abatement oversight on projects of comparable scope and complexity. The project CIH shall be an employee independent of the asbestos abatement contractor.

    a. **Certification, Accreditation and Training:** Provide evidence documenting that the selected CIH:

        1) Is certified in Comprehensive Practice by the American Board of Industrial Hygiene (ABIH)
        2) Is currently accredited as an Asbestos Building Inspector, Contractor/Supervisor, and Project Designer as described in 40 CFR Part 763.
        3) If the CIH will be reading Phase Contrast Microscopy (PCM) samples: has successfully completed the National Institute of Occupational Safety and Health (NIOSH) 582 course *Sampling and Evaluating Airborne Asbestos Dust* or equivalent; is currently registered in the American Industrial Hygiene Association's (AIHA) *Asbestos Analytical Registry*; and participates in their *Proficiency Analytical Testing* (PAT) certification program or participates in a qualified quality control program including PAT rounds.

    b. **Errors and Omissions Insurance:** Provide evidence showing the Project CIH has Errors and Omissions Insurance coverage. If the completion date of the project is beyond the effective dates of the insurance coverage, submit documentation stating that the CIH(s) Errors and Omissions Insurance coverage will be kept current and in effect for the duration of the project.

4. **Qualifications for the Industrial Hygienist (IH):** Name of and experience record of the Industrial Hygienist(s) (IH) , the CIH selects, who are qualified by virtue of their training and work experiences, to perform duties assigned by the CIH. Show experience on 5 projects of comparable scope and complexity, that the IH has overseen in the last five years. Provide evidence documenting that:

a. The selected IH is currently Accredited as an asbestos building inspector, Contractor/Supervisor, and Project Designer as described in 40 CFR Part 763.
b. The selected IH has successfully completed the NIOSH 582 course *Sampling and Evaluating Airborne Asbestos Dust* or equivalent and is currently registered in the American Industrial Hygiene Association's (AIHA) *Asbestos Analytical Registry*.
c. The selected IH currently participates in their (PAT) certification program or in a qualified quality control program including PAT rounds.

5. **Testing Laboratory Qualifications:** Proof of qualifications of testing laboratory and personnel as follows:

a. **Accreditation:** Provide proof of accreditation by the AIHA for asbestos analysis, and the NIST under National Voluntary Laboratory Accreditation Program (NVLAP) for asbestos analysis.
b. **Proficiency:** Provide the two most recent consecutive quarterly reports showing the laboratory analyzing the samples has been judged proficient by successful participation in the NIOSH's PAT certification and Bulk Asbestos Proficiency Analytical Testing (ELPAT) programs.
c. **Laboratories and Microscopists:** Provide proof the laboratory(s) selected to analyze project samples is accredited by the American Industrial Hygiene Association (AIHA), holds appropriate state license and successful participation of the laboratory in the Proficiency Analytical Testing (PAT) Program. For microscopists to analyze fibers-in-air samples on site, provide proof that they have been judged by current inclusion on the AIHA Asbestos Analyst's Registry (AAR) or other qualified quality control program.
d. **Errors and Omissions Insurance:** Provide evidence showing the laboratory has Errors and Omissions Insurance coverage. If the completion date of the project is beyond the effective dates of the insurance coverage, submit documentation stating that the laboratory's Errors and Omissions Insurance coverage will be kept current and in effect for the duration of the project.

B. **Contractors performing** asbestos abatement work for the Architect of the Capitol in the District of Columbia are required to be licensed to do asbestos work in the District of Columbia. The Contractor shall comply with the licensing regulations of:

Government of the District of Columbia
Department of Consumer and Regulatory Affairs (DCA)
Environmental Regulation Administration
51 N Street NE
5th Floor
Washington, DC 20002

C. **Contractor employees** assigned to active asbestos work areas in the District of Columbia must be licensed by the District of Columbia as trained asbestos workers and supervisors. The Abatement Personnel shall have completed the EPA AHERA/OSHA abatement

worker/supervisor course; have training on the standard operating procedures of the Abatement Contractor; have one year of asbestos abatement experience; have applicable medical and respiratory protection documentation; have certificate of training and State accreditation/license.

D. **Asbestos Control Limits:** The enclosed work areas shall be defined as a regulated area in accordance with 29 CFR 1910.1001 and 29 CFR 1926.1101.

1. **Inside Asbestos Work Area:** For personnel wearing negative-pressure respirators, air concentrations of asbestos shall not exceed an 8-hour time weighted average of 0.1 fibers (longer than 5 microns), per cubic centimeter of air as determined by the NIOSH 7400 method. Regardless of respiratory protection worn, air concentrations inside the work area will not exceed an 8-hour time weighted average of one (1) fiber per cubic centimeter as determined by the NIOSH 7400 method. In the event that this level is exceeded, all work in the asbestos work area shall stop and may not restart until fiber levels are below an 8-hour time weighted average of one (1) fiber per cubic centimeter as determined by the NIOSH 7400 method. It is the responsibility of the Contractor to provide an independent industrial hygiene consultant to provide the required personal air monitoring and to assure that all safety and health procedures are followed.
2. **Outside Asbestos Work Area:** Air concentrations of asbestos shall not exceed 0.01 fibers (longer than 5 microns) per cubic centimeter of air as determined by the NIOSH 7400 method. This applies to all areas in the building while work is in progress, except for the asbestos work area. Anytime this level is exceeded, all work in the asbestos work area will be stopped and may not restart until approval from the AOC/SOHB is given. To assure compliance with this provision, the government may provide (in addition to the approved sampling plan), air monitoring outside the Contractor's work area. If used, the government's industrial hygienist will have unrestricted access to the Contractor's work site. If the asbestos abatement Contractor wishes, he may perform any additional air sampling to assure compliance and for comparison with this specification.

E. **Project Certified Industrial Hygienist (Project CIH):** The primary Contractor shall engage the services of a CIH certified in Comprehensive Practice by the American Board of Industrial Hygiene (ABIH) for the period of this contract. Selection of the Project CIH is subject to approval of the Architect. This person is responsible for all environmental oversight of this contract. Although contracted by the General Contractor, the Project CIH is responsive to the Architect. During the contract period, the Project CIH is required to be on call and to be on project site within two hours after notification by the Architect. Additionally, the Project CIH will arrange for another Architect approved CIH, to be a back-up, to cover duties assigned under this specification, in the event that the selected Project CIH is not able to be on site as required or cannot report to the project site within the allotted 2 hours. Responsibilities for the Project CIH include but shall not be limited to the following:

1. **Coordination meeting.** Immediately after selection the Project CIH will contact the Architect to schedule a coordination meeting. Suggested attendees to this meeting are:

the AOC Construction Manager, a representative of the AOC/SOHB, and a representative of the AOC jurisdiction where the work is being performed. The purpose of this coordination meeting is to establish a clear working knowledge of the project and the responsibilities of the Project CIH with the Architect's staff.

2. **Certify**, that prior to beginning any abatement activity, all personnel is trained in accordance with OSHA 29 CFR 1926.1101 (k)(9) and any additional State/Local requirements. Training must include, at a minimum, the elements listed at 29 CFR 1926.1101 (k)(9)(viii). Training shall have been conducted by a third party, EPA/State approved trainer meeting the requirements of EPA 40 CFR 763 Appendix C (AHERA MAP). Provide copies of the initial training certificates and all refresher taken to date.
3. **Certify** that medical examinations meeting the requirements of 29 CFR 1926.1101 (m) are provided for all personnel working in the regulated area, regardless of exposure levels. The physician's written opinion as required by 29 CFR 1926.1101 (m)(4) shall be provided for each person and shall include in the opinion the person has been evaluated for working in a heat stress environment while wearing personal protective equipment and is able to perform the work.
4. **Review,** approve and submit for review to the Architect:

    a. **All asbestos abatement plans** of action for conformance to applicable referenced standards and this specification.
    b. **All submittals** (except initial submittal of contractor qualification information) the Contractor submits under paragraph 1.4.
    c. **All sampling data** within the time frames outlined in this specification.

5. **Review,** approve and submit to the Architect for review all required Material Safety Data Sheets (MSDS) submitted by the Contractor.
6. **Inspect and or oversee** the inspection of, asbestos abatement removal work for conformance with the approved plan.
7. **Develop and submit** for review a daily monitoring plan to test airborne levels of asbestos to determine exposure levels. The plan will include all personal, area, and final air samples to be used to clear a containment area.
8. **Perform daily monitoring** in accordance with the approved plan.
9. **Ensure all work** is performed in strict accordance with this specification at all times.
10. **Ensure hazardous exposure** to personnel and to the environment are adequately controlled at all times.
11. **The Project CIH or designated IH shall visually inspect** and approve all asbestos containment areas before asbestos containing materials are removed and before performing any final air tests.
12. **At the direction** of the AOC/SOHB, the Project CIH shall investigate possible contaminations and contamination related complaints. The Project CIH, shall perform any necessary sampling and/or site investigations in order to develop findings and conclusions of the reported incidence. Submit a verbal report that outlines all findings of the investigation to the AOC/SOHB within 24 hours of the initial notice. Submit a final written report to the AOC/SOHB within 3 work days of the initial notice.
13. **With the approval of the Architect the Project CIH** may select IH (s) to perform duties assigned by the Project CIH. The selected IH (s) shall be under the direct

supervision of the Project CIH, who will be responsible for IH(s) job performance, and will review and approve all results of their work. The selection of IH (s) shall be based on their training and work experiences and will be subject to the approval of the Architect.

14. **PPE:** Establish the Personal Protective Equipment (PPE) daily.

F. **Project Competent Person**: The abatement contractor shall assign a competent person as defined in 29 CFR 1926.1101, as a person who is capable of identifying existing asbestos hazards in the workplace and selecting the appropriate control strategy for asbestos exposure, and who has the authority to take prompt corrective measures to eliminate them. This person shall meet the criteria outlined in paragraph 1.2.A.2, of this specification and is required to be on site supervising the work. Responsibilities for the Project Competent Person include but shall not be limited to the following:

1. **Comply with** the requirements outlined in 29 CFR 1926.1101, paragraph (o) *Competent Person.*
2. **Follow** the requirements outlined by the Project CIH.
3. **Limit access** to the abatement area by permitting only authorized personnel and personnel listed in "Access to Work Area" below to enter.
4. **No employee** shall be allowed to wear a respirator unless a physician has determined they are capable of doing so and has issued a written opinion for that person.
5. **All personnel** wearing respirators shall have a current qualitative/quantitative fit test which was conducted in accordance with 29 CFR 1910.134 (f) and Appendix A. Fit tests shall be done for PAPRs with the blower off.
6. **The Competent Person** shall assure that the positive/negative fit check is done each time the respirator is donned by an employee. Head coverings must cover respirator head straps. Any situation that prevents an effective face piece to face seal as evidenced by failure of a fit check shall preclude that person from wearing a respirator until resolution of the problem.
7. **Maintain** a daily log of all persons who enter and exit the work area until the containment is authorized for removal.
8. **Working** with the project CIH, ensure that all documents are filed in the final report due three days after the containment is authorized for removal.
9. **Ensure** that only personnel with current EPA accreditation and DC asbestos license, perform abatement work in the work area.

1.3 REFERENCES:

A. **American National Standards Institute (ANSI) Publication:**

1. Z9.2-79 - Fundamentals Governing the Design and Operation of Local Exhaust Systems

B. **American Society for Testing and Materials (ASTM) Publication:**

1. E 849-82 - Safety and Health Requirements relating to Occupational Exposure to Asbestos

C. **Code of Federal Regulations (CFR):**

1. 29 CFR 1910.1001, Occupational Safety and Health Act (OSHA), INCLUDING Appendix A through I.
2. 29 CFR 1910.20, Subpart C, General Safety and Health Provisions.
3. 29 CFR 1910.134, OSHA General Industry Respirator Requirements.
4. 29 CFR 1926.1101. Occupational Exposure to Asbestos, Construction Industry Standard, INCLUDING Appendix A through K.
5 40 CFR Part 61, Subpart M: U.S. Environmental Protection Agency, National Emission Standards for Hazardous Air Pollutants (NESHAP) Asbestos.

D. **State and Local Regulations:**

1. Applicable state and local regulations shall apply.

E. **Architect of the Capitol**

1. The Architect of the Capitol's *Uniform Asbestos Management Program.*
2. Other special requirements listed by the AOC.

1.4 **SUBMITTALS:**

A. **General:** Transmit all submittals to the Architect for review.

B. **Initial Submittal of Asbestos Abatement Contractor or Subcontractor Qualification Information:** Items 1 through 3 below are to be submitted as a complete package after the bid receipt, but are required to be reviewed by the AOC Safety and Occupational Health Branch (AOC/SOHB) prior to Notice to Proceed.

1. **Asbestos Abatement Contractor or Subcontractor Qualification Information:** Submit for review, the name, address, telephone number and required documentation of qualifications of the Asbestos Abatement Contractor or Subcontractor, selected for this contract.
2. **Certified Industrial Hygienist (Project CIH):** Submit name, address, telephone number and required documentation of qualifications of the independent Certified Industrial Hygienist selected to perform the duties outlined in 1.2.E above.
3. **Experience and Qualifications of Supervision:** Submit name of and required documentation of qualifications of the proposed competent person who would be assigned to this project, as outlined in "Definitive Responsibility Criteria" above.

C. **Post-Award Asbestos Abatement Submittal:** Items listed below are to be submitted after the award, but are required to be reviewed and recommended approved, by the Project Certified Industrial Hygienist (CIH) prior to submission to the Safety and Occupational

Health Branch or his designated representative. These actions must be completed prior to starting work.

1. **Experience and Qualifications of Workers:** Name and experience record, if any, of workmen who will be assigned to this project. Include for each person evidence of successful completion of State of Maryland or Commonwealth of Virginia training given by qualified personnel. Provide certification that employees meet the OSHA medical surveillance requirements.
2. **License Information:** Provide a copy of a current District of Columbia Asbestos Contractor's License and Individual Asbestos License for asbestos projects in the District of Columbia.
3. **CIH Approved Plan of Action:** Before start of work submit the design and layout of the regulated area and the negative air machines. The submittal shall be prepared by a certified asbestos project designer and shall indicate the number of, location of, and size of negative air machines. The point(s) of exhaust, air flow within the regulated area, anticipated negative pressure differential, and supporting calculations for sizing shall be provided. In addition, submit the following:

    a. Manufacturer's information on the negative air machine(s).
    b. Method of supplying power to the units and designation/location of the panels.
    c. Description of testing method(s) for correct air volume and pressure differential.
    d. Provide manufacturer's product data on the pressure differential measuring device used.

    There will be 4 air exchanges required with minus 0.02 inch of water pressure differential. The plan must include the location and layout of each containment and decontamination areas, the sequencing of asbestos work, the interface of trades involved in the performance of work, methods to be used to assure the safety of building occupants and visitors to the site. The plan must explain the use of portable HEPA ventilation systems, identify the means of isolating the building's HVAC system during removal operations, detail the method of removal to prohibit emissions into the work area, and identify the method of packaging the asbestos waste. No locally exhausted HEPA filtered drills or saws shall be used as the sole means of containment of drilling or cutting asbestos-containing materials unless prior approval is given by the AOC/SOHB.
4. **Project CIH Approved Area Sampling Plan:** Submit a detailed plan which shows the proposed air sampling strategy to be used to comply with the requirements specified. This plan must be separate from the CIH approved plan of action. Show all locations where sampling will occur during the asbestos abatement operation.
5. **Temporary Storage of Containerized Asbestos Waste:** Submit a request to the AOC, requesting a location for temporary storage of containerized asbestos waste that is generated by this project.
6. **Project CIH Approved Disposal Plan:** Submit to the Architect a disposal plan including the location of the approved disposal site and the contractor's method for documenting proper asbestos disposal. Detail the methods by which the containerized asbestos waste is taken from the work area to the temporary storage area.

7. **IH qualifications:** Submit the name and required documentation of qualifications of the proposed IH (s)for this project.
8. **NESHAP Notification Requirements**: The contractor shall coordinate with the AOC/SOHB or designated Jurisdictional point of contact, in submitting the appropriate written notification. Any costs incurred due to expiration of the EPA NESHAP notice before completing assigned abatement work will be at the expense of the Contractor. **For the purpose of this contract, initial and all changes to the initial notification shall be postmarked by the appropriate addressee below, at least** 10 working days and 35 calendar days respectively, prior to the start of asbestos abatement work:

   a. **Ten (10) working days** prior to beginning asbestos abatement work notify:

      U. S. Environmental Protection Agency Region III
      Pesticides/Asbestos
      Programs and Enforcement Branch
      Mail Code: 3WC32
      1650 Arch Street
      Philadelphia, PA 19107

      And

      District of Columbia
      Department of Health
      Air Quality Division
      51 N Street NE
      Washington, DC 20002
      Phone: (202) 535-2259
      FAX Number 202-535-1371

      Thirty Five (35) days prior to beginning asbestos abatement work notify:

      AOC, Safety and Occupational Health Branch (AOC/SOHB)
      Ford House Office Building
      Room HOB2-553
      Washington DC 20515
      Phone: (202) 225-4043
      FAX NUMBER (202) 226-9915

      And the affected AOC Building Superintendent to satisfy the District of Columbia's building occupant asbestos abatement notification requirement.

   b. **Changes to the original NESHAP Notification:** Any changes to the original notification, shall be coordinated with the AOC/SOHB prior to submission. After this coordination, the Contractor shall submit changes to the original notification, pursuant to the NESHAP requirements, within the time frames specified and to the appropriate jurisdiction listed above.

c. **Emergency NESHAP Notices:** The Contractor, shall contact the AOC/SOHB, for procedures regarding the submission of any emergency notifications, pursuant to the NESHAP requirements.

9. **AOC Asbestos Project Number:** Contact the AOC/SOHB at 202-225-4043 for this number. This Asbestos Control Number will be used in all documents concerning this project.
10. **Certificates of Compliance:** RESERVED
11. **Information on Encapsulating Material:** Submit written evidence that material meets the the specified characteristics and the latest requirements of the EPA.
12. **Laboratory Qualification Information:** Submit proof of required qualifications of testing laboratory and their personnel. See "Testing Laboratory Qualifications".
13. **Containers For Disposal of Friable Asbestos:** Submit for review, the manufacturers cut sheet for the bags and containers the contractor intends to use to dispose of the asbestos containing material. Bags shall be minimum of 6 mil polyethylene (or equivalent) and labeled in accordance with 40 CFR Part 61 subpart M (NESHAP) and 29 CFR 1926.1101.
14. **Decontamination Facility:** Unless otherwise specified by the AOC/SOHB, throughout the time that asbestos abatement is taking place, the Asbestos Abatement Contractor will maintain a working three-stage decontamination facility at the point of access to the containment. As a minimum, the decontamination facility will consist of a clean changing area, an air space, a shower, another air space, and a contaminated changing area. The size and location of this facility shall be reviewed by the AOC/SOHB.
15. **Sequencing/Scheduling:** Submit for review, the sequencing and/or scheduling for each containment or containments being performed under this contract, to the AOC/SOHB.
16. **Filtering for vacuums and exhaust equipment** shall conform to ANSI Z9.2. HEPA filters shall be used in all vacuums and exhaust equipment. All HEPA filtered vacuums and exhaust equipment shall be tested for integrity with a Dioctylphthalate (DOP) or Dioctylsubacate (DOS) smoke generator. Submit evidence showing that all HEPA filtered vacuums and exhaust equipment, scheduled for use under this Contract, have been tested and passed an DOP or DOS smoke generator.
17. **Negative Air Machines:** All negative air machines used on this project shall have affixed to its outer cabinet a label certifying its acceptance under OSHA's Nationally Recognized Testing Laboratory program (NRTL).
18. **HEPA Filter Replacement:** If any HEPA filtered vacuums or ventilation equipment requires HEPA filter replacement during this abatement operation, another dioctylpthalate (DOP) test shall be performed. The results of the dioctylpthalate (DOP) test shall be submitted when received and reviewed by the AOC/SOHB before re-using the equipment under this Contract.
19. **Encapsulant Requirements:** Submit, before the start of work, the manufacturer's technical data for all types of encapsulant used on the project. Provide application instructions. Submit certification data as required in Encapsulant section. Submit MSDS for each material in compliance with 29 CFR 1910.1200. Submit certification

from manufacturer that material it will adequately wet ACM as per NESHAP requirements.

D. **During-Work Asbestos Abatement Submittal:** After review and approval by the Project CIH, submit items required under 1.4D1 and 1.4D2 to the AOC/SOHB as the work progresses and at the times specified.

1. **Air Monitoring and Work Area Inspections:**

a. ***Air Monitoring Results:*** Post for all workers to see, within 24 hours of collection, the results of all air monitoring conducted. Post the results at a location designated by the General Contractor and notify the AOC/SOHB. A copy of the results shall be provided to the AOC/SOHB within the same time frame.

b. ***Differential Air Pressure Readings:*** Starting when a negative pressure containment is erected and approved by the Project CIH, a strip chart recorder shall be installed and work area relative pressure shall be monitored 24 hours a day until final air clearances are produced. Submit a copy of the daily strip chart record to the AOC/SOHB within 24 hours after the recording was made.

c. ***Work Area Inspections:*** The Project CIH shall personally perform a visual inspection of the abatement work area for the pre-removal, pre-final, and re-occupancy stage. The Project CIH or the IH(s) working for the Project CIH, will perform visual inspections of the abatement work area daily and pre-final. Submit documentation of the daily, pre-removal, pre-final inspections to the AOC/SOHB, within 24 hours of completion. Documentation of the re-occupancy stages of the work inspection shall be submitted to the AOC/SOHB as soon as completed.

2. **Transporting and Disposing of Asbestos Containing Materials (ACM):**

a. ***Disposal Receipts:*** Submit receipts from the transporter, that acknowledge the contractor's shipment of ACM from the site (NESHAP Waste Shipment Records) within three (3) days following removal of ACM from the premises. Provide on each receipt the date, quantity of material removed, and signature of an authorized representative of the transporter. A signed and dated copy to the Waste Shipment Record, showing receipt at an authorized landfill, must be received by AOC/SOHB within 10 calendar days of the date of the shipping receipt.

b. ***Transportation Vehicles:*** Transportation shall be in vehicles dedicated to asbestos transportation. Vehicles shall be marked in accordance with DOT and NESHAP regulations.

E. **Final Submittal:** After review and approval by the Project CIH, submit items required under 1 and 2 below to the AOC/SOHB within 3 calendar days at the completion of work for each containment. The CIH shall submit a project report consisting of:

1. **The daily log book** information and documentation of events during the abatement project.
2. **Copies** of all waste shipment records for asbestos waste sent to the designated landfill.
3. **The report** shall include a certificate of completion.
4. **All air** and bulk sampling conducted for this project.
5. **All final** air clearance data.
6. **All** perimeter samples.
7. **Copies of training certificates** for all personnel engaged in this abatement work.
8. **Copies of respirator fit tests** for all personnel engaged in this abatement work.
9. **Copies** of the OSHA required asbestos and respirator medical clearances for all personnel engaged in this abatement work.
10. **The final report** shall include an executive summary. The executive summary must show:

    a. ***A summary*** of the work done.
    b. ***A statement*** that all personnel conducting this abatement operation had all required training and were medically cleared to perform this type of work in accordance with OSHA, EPA regulations and all State and Local laws, rules and regulations.
    c. ***The executive summary*** must also show that all final air samples results were below the limits established by EPA, the District of Columbia, and this specification and declare the area ready for re-occupancy.
    d. ***Describe*** the type, application, and quantity of asbestos containing materials removed by the contractor.
    e. ***Include all copies*** of the final air and bulk sampling as performed by a third party.
    f. ***Indicate*** that all building systems disturbed by the contractor during the work under the contract have been reinstalled and are in working order.

1.5 CONTRACTOR RESPONSIBILITY:

A. **The Contractor** shall assume full responsibility and liability for compliance with all applicable Federal, State, and local regulations pertaining to the protection of workers, visitors to the site, and persons occupying areas adjacent to the site. The Contractor is responsible for providing medical examinations and maintaining medical records of personnel as required by the applicable Federal, State, and local regulations, and shall hold the government harmless for failure to comply with any applicable safety or health regulation on the part of himself, his employees, or his subcontractors.

B. **The Contractor shall** secure all necessary permits in conjunction with asbestos removal, hauling and disposition and provide timely notification of such actions, as may be required by federal, state, regional, and local authorities. For this project, ensure that notification to the Regional Office of the EPA and the District of Columbia is made, and provide copies of the notification to the AOC/SOHB 10 days prior to the commencement of the work. Provide notification in accordance with 40 CFR 61.22(d)(1).

C. **The Contractor** shall inform the affected building Superintendent and the AOC/SOHB not less than thirty five (35) days prior to commencement of the asbestos abatement, of the health or safety factors that necessitate the asbestos abatement and procedures that will be taken to protect the health, safety, and possessions of the building occupants.

D. **Site Security:**

1. **Regulated area** access is to be restricted only to authorized, trained/accredited and protected personnel. These may include the Abatement Contractor's employees, employees of Subcontractors, AOC employees and representatives, State and local inspectors, and any other designated individuals. A list of authorized personnel shall be established prior to commencing the project and be posted in the clean room of the decontamination unit.
2. **Entry into** the regulated area by unauthorized individuals shall be reported immediately to the Competent Person.
3. **A log book** shall be maintained in the clean room of the decontamination unit. Anyone who enters the regulated area must record their name, affiliation, time in, and time out for each entry.
4. **Access to the** regulated area shall be through a single decontamination unit. All other access (doors, windows, hallways, etc.) shall be sealed or locked to prevent entry to or exit from the regulated area. The only exceptions for this requirement are the waste load-out area which shall be sealed except during the removal of containerized asbestos waste from the regulated area, and emergency exits. Emergency exits shall not be locked from the inside, however, they shall be sealed with poly sheeting and taped until needed.
5. **The Abatement Contractor's** Competent Person shall control site security during abatement operations in order to isolate work in progress and protect adjacent personnel. Containment shall be locked out when the competent person leaves the site. The entrance to the regulated area requires all entrants to be logged in/out so that only authorized personnel are allowed entrance.
6. **The Abatement Contractor** will have the AOC's assistance in notifying adjacent personnel of the presence, location, and quantity of ACM in the regulated area and enforcement of restricted access by the AOC's employees.
7. **The Abatement Contractor** shall provide plans to secure the regulated area during non-working hours.

E. **Emergency Action Plan and Arrangements:**

1. **An Emergency Action Plan** shall be developed by the Abatement Contractor prior to commencing abatement activities and shall be agreed to by the Abatement Contractor and the AOC. The Plan shall meet the requirements of 29 CFR 1910.38 (a);(b).
2. **Emergency procedures shall** be in written form and prominently posted in the clean room and equipment room of the decontamination unit. Everyone, prior to entering the regulated area, must read and sign these procedures to acknowledge understanding of the regulated area layout, location of emergency exits and emergency procedures.

3. **Emergency planning** shall include written notification of police, fire, and emergency medical personnel of planned abatement activities; work schedule and layout of regulated area, particularly barriers that may affect response capabilities.
4. **Emergency planning** shall include consideration of fire, explosion, hazardous atmospheres, electrical hazards, slips/trips and falls, fiber release episodes, confined spaces, and heat stress illness. Written procedures addressing emergency situations shall be developed. Employees need to be aware of these procedures.
5. **Employees shall** be trained in regulated area/site evacuation procedures in the event of workplace emergencies.

    a. ***For non life-threatening*** situations - employees injured or otherwise incapacitated shall decontaminate following normal procedures with assistance from fellow workers, if necessary, before exiting the regulated area to obtain proper medical treatment.
    b. ***For life-threatening*** injury or illness, worker decontamination shall take least priority after measures to stabilize the injured worker, remove them from the regulated area, and secure proper medical treatment.

6. **Telephone numbers** of all emergency response personnel shall be prominently posted in the clean room, along with the location of the nearest telephone.
7. **The Emergency Action Plan** shall provide for a contingency plan in the event that an incident occurs that may require the modification of the standard operating procedures during abatement. Such incidents include, but are not limited to, fire; accident; power failure; negative pressure failure; and supplied air system failure. The Abatement Contractor shall detail procedures to be followed in the event of an incident assuring that work is stopped and wetting is continued until correction of the problem.

1.6 **PROJECT/SITE CONDITIONS:**

A. **Means of Egress:** Establish and maintain emergency and fire exits from the work area.

B. **Environmental Conditions to be Maintained:** Normal environmental conditions (heat, light, air conditioning) must be maintained outside of the work area.

C. **Decontamination Facilities:** Provide each work area with separate personnel decontamination facility (PDF) and equipment decontamination facilities (EDF). Ensure that the PDF is the only means of ingress and egress to the regulated area and that all equipment, bagged waste, and other material exit the regulated area only through the EDF. See OSHA 29 CFR 1926.1101, Appendix F. The size and location of this facility shall be reviewed by the AOC/SOHB.

1. **General Requirements:** All personnel entering or exiting a regulated area shall follow the requirements of 29 CFR 1926.1101 (j)(1) and these specifications. All equipment and materials must exit the regulated area through the EDF and be decontaminated in accordance with these specifications. Walls and ceilings of the PDF and EDF must be constructed of a minimum of 2 layers of 6 mil, clear/opaque/black/

white fire retardant polyethylene sheeting and be securely attached to existing building components and/or an adequate temporary framework. A minimum of 2 layers of 6 mil poly shall also be used to cover the floor under the EDF and PDF units. Construct doors so that they overlap and secure to adjacent surfaces. Weigh sheets with layers of duct tape so that they close quickly after release. Put arrows on sheets so they show direction of travel and overlap. Construct a solid barrier on the occupied side(s) to protect the sheeting if the area adjacent to the abatement is occupied,.

2. **Temporary Facilities to the PDF and EDF:** The Competent Person shall provide temporary water service connections to the EDF and PDF. Water supply must be of adequate pressure and meet requirements of 29 CFR 1910.141(d)(3). Provide adequate temporary electric power with ground fault protection and overhead wiring in the EDF and PDF. Provide a sub-panel for all temporary power in the clean room. Provide adequate lighting to maintain a minimum of 50 foot candles in the EDF and PDF. Provide temporary heat to maintain 70 deg F throughout the PDF and EDF except the shower of the PDF shall be maintained at 75 deg F.
3. **Personnel Decontamination Facility (PDF):** The Competent Person shall provide a PDF consisting of shower room which is contiguous to a clean room and equipment room. The PDF must be sized to accommodate the number of personnel scheduled for the project. The shower room, located in the center of the PDF, shall be fitted with as many portable showers as necessary to insure all employees can complete the entire decontamination procedure within 15 minutes. The PDF shall be constructed of opaque poly for privacy. The PDF shall be constructed to eliminate any parallel routes of egress without showering.
4. **Clean Room:** The clean room must be visually separated from the rest of the building to protect the privacy of personnel changing clothes. The clean room shall be constructed of at least 2 layers of 6 mil fire retardant poly to provide an air tight room. Provide a minimum of 2 flapped doorways 3 feet wide. One doorway shall be the entry from outside the PDF and the second doorway shall be to the shower room of the PDF. The floor of the clean room shall be maintained in a clean, dry condition. Shower overflow shall not be allowed into the clean room. All surfaces in the clean room shall be disinfected twice after each shift change. An adequate supply of disposable towels and disposable protective clothing shall be present in the clean room. Provide up to 2 storage lockers per person. A portable fire extinguisher, Type ABC, shall be provided in accordance with OSHA and NFPA Standard 10. All persons entering the regulated area shall remove all street clothing in the clean room and dress in disposable protective clothing and respiratory protection. Any person entering the clean room does so either from the outside with street clothing on or is coming from the shower room without clothing or with bathing suits and thoroughly washed. Ensure that females, who are required to enter the regulated area be ensured of their privacy throughout the entry/exit process by posting guards at both entry points to the PDF so no male can enter or exit the PDF during her stay in the PDF.
5. **Shower Room**: The Competent Person shall assure that the shower room is a completely water tight compartment to be used for the movement of all personnel from the clean room to the equipment room and for the showering of all personnel going from the regulated area to the clean room. Each shower shall be constructed so water runs down the walls of the shower and into a drip pan. Install a freely draining smooth

floor on top of the shower pan. The shower room shall be separated from the rest of the building and from the clean room and equipment room using air tight walls made from at least 2 layers of 6 mil fire retardant poly. The shower shall be equipped with a shower head and controls, hot and cold water, drainage, soap dish and continuous supply of soap, and shall be maintained in a sanitary condition throughout its use. The controls shall be arranged so an individual can shower without assistance. Provide a flexible hose shower head. Waste water will be pumped to a drain after being filtered through a minimum of a 100 micron sock in the shower drain; a 20 micron filter; and a final 5 micron filter. Filters will be changed a minimum of daily or more often as needed. Filter changes must be done in the shower to prevent loss of contaminated water. Hose down all shower surfaces after each shift and clean any debris from the shower pan. Residue is to be disposed of as asbestos waste.

6. **Equipment Room**: The Competent Person shall provide an equipment room which shall be an air tight compartment for the storage of work equipment, reusable footwear and for use as a change station for personnel exiting the regulated area. The equipment room shall be separated from the regulated area by a minimum 3 foot wide door made of three layers of 6 mil fire retardant poly. The equipment room shall be separated from the regulated area, the shower room and the rest of the building by air tight walls and ceiling constructed of a minimum of 2 layers of 6 mil fire retardant poly. If the airborne level of asbestos in the regulated area is expected to exceed 0.5 f/cc, add an additional air-lock between the equipment room and the regulated area. Damp wipe all surfaces of the equipment room after each shift change. Provide an additional loose layer of 6 mil fire retardant poly per shift change and remove this layer after each shift. Provide a temporary electrical sub-panel in this room to accommodate any power tools and equipment used in the regulated area.
7. **PDF construction shall be:** Clean room at the entrance followed by a shower room followed by an equipment room leading to the regulated area. Each doorway in the PDF is minimum of double flaps of 6 mil fire retardant poly.
8. **Equipment Decontamination Facility (EDF)**: The Competent Person shall provide an EDF consisting of a wash room, and clean room for removal of equipment and material from the regulated area. Personnel shall not enter or exit the EDF except in the event of an emergency. Clean debris and residue in the EDF daily. All surfaces in the EDF shall be wiped/hosed down after each shift and all debris shall be cleaned from the shower pan. The EDF shall consist of the following:

    a. **Wash Down Station:** Provide an enclosed shower unit in the regulated area just outside the Wash Room as an equipment bag and container cleaning station.
    b. **Wash Room**: Provide a wash room for cleaning of bagged or containerized asbestos containing waste materials passed from the regulated area. Construct the wash room using materials selected and furnished by the Abatement Contractor and 2 layers of 6 mil fire retardant poly. Locate the wash room so that packaged materials, after being wiped clean, can be passed to the Holding Room. Doorways in the wash room shall be constructed of two layers of 6 mil fire retardant poly.
    c. **Holding Room**: Provide a holding room as a drop location for bagged materials passed from the wash room. Construct the holding room using materials selected

and furnished by the Abatement Contractor and 2 layers of 6 mil fire retardant poly. The holding room shall be located so that bagged material cannot be passed from the wash room to the clean room unless it goes through the holding room. Doorways in the holding room shall be constructed of two layers of 6 mil fire retardant poly.

d. **Clean Room:** Provide a clean room to isolate the holding room from the building. Construct the clean room using materials selected and furnished by the Abatement Contractor and 2 layers of 6 mil fire retardant poly. The clean room shall be located so as to provide access to the holding room from the building. Doorways to the clean room shall be constructed of two layers of 6 mil fire retardant poly. When a negative pressure differential system is used, a rigid enclosure separation between the EDF clean room and the adjacent areas shall be provided.

e. **EDF construction shall be:** Wash Room leading to a Holding Room followed by a Clean Room leading to the building.

9. **Equipment Decontamination Procedures:** At wash down station in the regulated area, thoroughly wet clean contaminated equipment and/or sealed polyethylene bags and pass into Wash Room after visual inspection. When passing anything into the Wash Room, close all doorways of the EDF, other than the doorway between the wash down station and the Wash Room. Keep all outside personnel clear of the EDF. Once inside the Wash Room, wet clean the equipment and/or bags. Close all doorways except the doorway between the Holding Room and the Clean Room. Workers from the Clean Room/Exterior shall enter the Holding Room and remove the decontaminated/cleaned equipment/bags for removal and disposal. These personnel shall wear full protective clothing and appropriate respirators. At no time shall personnel from the clean side be allowed to enter the Wash Room.

D. **Access to Work Area:** Only approved personnel are authorized access to the work area. Once asbestos removal has started, access to the abatement work area by non-approved personnel is not permitted unless authorized by the AOC/SOHB representative, the Project CIH or the competent person. Access to work areas shall always be through decontamination areas. No employee shall be allowed to wear a respirator unless a physician has determined they are capable of doing so and has issued a written opinion for that person. All personnel wearing respirators shall have a current qualitative/quantitative fit test which was conducted in accordance with 29 CFR 1910.134 (f) and Appendix A. Fit tests shall be done for PAPRs with the blower off. The Competent Person shall assure that the positive/negative fit check is done each time the respirator is donned by an employee. Head coverings must cover respirator head straps. Any situation that prevents an effective face piece to face seal as evidenced by failure of a fit check shall preclude that person from wearing a respirator until resolution of the problem. The Project CIH shall review work area air samples and make adjustments for the type of respiratory protection required. All personnel in the regulated area shall not be allowed to eat, drink, smoke, chew tobacco or gum, apply cosmetics, or in any way interfere with the fit of their respirator. The following personnel shall have access to work area with the established respiratory protection:

1. The AOC/SOHB will provide a list of AOC employees, who are authorized access to the abatement area.
2. OSHA Inspectors.
3. EPA Inspectors.
4. DC Inspectors.
5. Approved Contractor personnel.

E. **Protective Clothing:** Provide boots, booties, hard hats, goggles, clothing, respirators and any other personal protective equipment as determined by conducting the hazard assessment required by OSHA in 29 CFR 1910.132 (d). Provide all personnel entering the regulated area with disposable full body coveralls, disposable head covering, and 18 inch boot coverings. The Competent Person shall ensure the integrity of personal protective equipment worn for the duration of the project. Provide plastic/rubber disposable gloves for hand protection. Cloth type gloves may be worn under plastic/rubber gloves, but cannot be used alone. Duct tape shall be used to secure all suit sleeves to wrists and to secure foot coverings at the ankle. The contractor shall provide daily, five sets of protective clothing for use by visiting authorized personnel.

F. **Regulated Area Entry Procedure:** Worker protection shall meet the most stringent requirement. The Competent Person shall ensure that each time workers enter the regulated area, they remove ALL street clothes in the clean room of the decontamination unit and put on new disposable coveralls, head coverings, a clean respirator, and then proceed through the shower room to the equipment room where they put on non-disposable required personal protective equipment.

G. **Decontamination Procedure - PAPR:** The Competent Person shall require all personnel to adhere to following decontamination procedures whenever they leave the regulated area.

1. **When exiting** the regulated area, remove disposable coveralls, and ALL other clothes, disposable head coverings, and foot coverings or boots in the equipment room.
2. **Proceed to the** shower with respirator but without clothing or with bathing suit. Showering is MANDATORY. Care must be taken to follow reasonable procedures in removing the respirator to avoid damaging filters while showering. The following procedure is required as a minimum:

    a. **Thoroughly wet** body including hair and face. If using a PAPR, hold blower and battery above head to keep filters dry.
    b. **With respirator** still in place, thoroughly decontaminate body, hair, respirator face piece, and all other parts of the respirator except the blower and battery pack on a PAPR. Pay particular attention to cleaning the seal between the face and respirator face piece and under the respirator straps.
    c. **Take a deep breath**, hold it and/or exhale slowly, completely wetting hair, face, and respirator. While still holding breath, remove the respirator and hold it away from the face before starting to breathe.

3. **Carefully decontaminate** the face piece of the respirator inside and out. If using a PAPR, shut down using the following sequence: a) first cap inlets to filters; b) turn blower off to keep debris collected on the inlet side of the filter from dislodging and contaminating the outside of the unit; c) thoroughly decontaminate blower and hoses; d) decontaminate battery pack with a damp rag. (Note: THIS PROCEDURE IS NOT A SUBSTITUTE FOR RESPIRATOR CLEANING!).
4. **Shower and** wash body completely with soap and water. Rinse thoroughly.
5. **Rinse shower** room walls and floor to drain prior to exiting.
6. **Proceed from** shower to clean room; dry off and change into street clothes or into new disposable work clothing.

H. **Decontamination Procedure - Air Purifying, Negative Pressure Respirator:** The Competent Person shall require all personnel use the following decontamination procedures, as a minimum, whenever leaving the regulated area with a full face, HEPA filtered respirator:

1. **When exiting** the regulated area, remove disposable coveralls and ALL other clothes, disposable head coverings, and disposable foot coverings or boots in the equipment room.
2. **Still wearing** the respirator and completely naked, proceed to the shower, which is mandatory. Care must be taken to follow reasonable procedures in removing the respirator and filters to avoid asbestos fibers while showering. The following procedure is required, as a minimum:

    a. **Thoroughly wet** body from neck down. Wet hair as thoroughly as possible without wetting the respirator filter.
    b. **Take a deep** breath, hold it and/or exhale slowly, complete wetting of hair, thoroughly wetting face, respirator and filter(s). While still holding breath, remove respirator and hold it away from face before starting to breathe.

3. **Dispose of** wetted filters from respirator.
4. **Carefully decontaminate** respirator face piece and respirator inside and out. (NOTE: THIS IS NOT A SUBSTITUTE FOR RESPIRATOR CLEANING!).
5. **Shower and wash** body completely with soap and water. Rinse thoroughly.
6. **Rinse shower** room walls and floor to drain prior to exiting.
7. **Proceed from** shower room to clean room and change into street clothes or into new disposable work clothes.

PART 2 - PRODUCTS

2.1 MATERIALS AND EQUIPMENT:

A. **General Requirements (All Abatements Projects):** All equipment, including protective clothing and respirators, used in the execution of this contract and provided to visitors to the site, shall be approved by the Project CIH and shall comply with ASTM E 849 and with the applicable Federal, State, and local regulations. Respirators shall conform to the OSHA

requirements in 29 CFR 1910.134 and 29 CFR 1926.1101, except that single use and disposable respirators shall not be used. Type of respirators required shall be as specified by the Project CIH. If any air sampling indicates levels above 0.1 fibers per cubic centimeter or "too dirty to count", powered air or supplied air (type C) respirators shall be required during actual removal operations. Prior to the start of work, the abatement contractor shall provide and maintain a sufficient quantity of materials and equipment to assure continuous and efficient work throughout the duration of the project. Work shall not start unless the following items have been delivered to the site and the CIH has submitted verification to the AOC's representative to this effect.

1. **All materials** shall be delivered in their original package, container or bundle bearing the name of the manufacturer and the brand name (where applicable).
2. **Store all materials** subject to damage off the ground, away from wet or damp surfaces and under cover sufficient enough to prevent damage or contamination. Flammable materials cannot be stored inside buildings. Replacement materials shall be stored outside of the regulated/work area until abatement is completed.
3. **The Abatement Contractor** shall not block or hinder use of buildings by staff and visitors to the AOC in partially occupied buildings by placing materials/equipment in any unauthorized place.
4. **The Competent Person** shall inspect for damaged, deteriorating or previously used materials. Such materials shall not be used and shall be removed from the work site and disposed of properly.
5. **Polyethylene sheeting** for walls in the regulated area shall be a minimum of 6-mil thick. For floors and all other uses, sheeting of at least 6-mil thickness shall be used in widths selected to minimize the frequency of joints. Fire retardant poly shall be used throughout.
6. **The method of** attaching polyethylene sheeting shall be agreed upon in advance by the Contractor and the AOC and selected to minimize damage to equipment and surfaces. Method of attachment may include any combination of moisture resistant duct tape or other waterproof tape, furring strips, spray glue, staples, nails, screws, lumber and plywood for enclosures or other effective procedures capable of sealing polyethylene to dissimilar finished or unfinished surfaces under both wet and dry conditions (including the use of amended water).
7. **Polyethylene sheeting** utilized for personnel decontamination facility shall be opaque white or black in color, 6 mil fire retardant poly.
8. **Installation and plumbing hardware**, showers, hoses, drain pans, sump pumps and waste water filtration system shall be provided.
9. **An adequate number** of negative pressure units capable of providing a minimum of 4 air changes per hour in the regulated area while maintaining minus 0.02 inch water column shall be used. Two (2) additional negative pressure units shall be available to replace any malfunctioning unit.
10. **An adequate number** of HEPA vacuums, air sampling pumps and loaded filter cassettes, supplied air system, if used, providing Grade D breathing air with respirators and air lines sufficient for personnel, pressure differential gauge and recording capability shall be provided.

11. **An adequate number** of scrapers, sprayers, nylon brushes, brooms, disposable mops, rags, sponges, staple guns, shovels, ladders and scaffolding of suitable height and length as well as meeting OSHA requirements, fall protection devices, water hose to reach all areas in the regulated area, airless spray equipment, and any other tools, materials or equipment required to conduct the abatement project. All electrically operated hand tools, equipment, electric cords shall be equipped with ground-fault circuit protection.
12. **Special protection** for objects in the regulated area shall be detailed (e.g., plywood over carpeting or hardwood floors to prevent damage from scaffolds and falling material).
13. **6 mil disposal** bags for asbestos waste shall be pre-printed with labels and markings as required by OSHA, EPA.
14. **Impermeable asbestos** disposal drums shall be metal or fiberboard with locking ring tops with required OSHA, EPA and DOT labels and markings.
15. **The AOC shall be** provided a copy of the MSDS as required for all hazardous chemicals including encapsulants under OSHA 29 CFR 1910.1200 - Hazard Communication. Methylene chloride shall not be used with any spray adhesive or other product.
16. **DANGER signs**, as many and as required by OSHA 29 CFR 1926.1101(k)(7), shall be provided and placed by the Competent Person. All other posters and notices required by Federal and State regulations shall be posted in the Clean Room.
17. **Adequate respirators**, disposable protective clothing, hard hats, goggles, gloves and footwear for the project and number of personnel/shifts shall be provided. All personal protective equipment issued must be based on a hazard assessment conducted under 29 CFR 1910.132(d).

B. **Negative Pressure Filtration System:** The Abatement Contractor shall provide enough HEPA negative air machines to completely exchange the regulated area air volume 4 actual times per hour. The Competent Person shall determine the number of units needed for each regulated area by dividing the cubic feet in the regulated area by 15 and then dividing that result by the actual cubic feet per minute (cfm) for each unit to determine the number of units needed to effect 4 air changes per hour and maintain -.02 inches of negative pressure. Provide a standby units in the event of machine failure and/or emergency in an adjacent area.

C. **Negative Air Machines (HEPA Units):**

1. **Negative Air Machine Cabinet:** The cabinet shall be constructed of steel or other durable material capable of withstanding potential damage from rough handling and transportation. The width of the cabinet shall be less than 30 inches in order to fit in standard doorways. The cabinet must be factory sealed to prevent asbestos fibers from being released during use, transport, or maintenance. Any access to and replacement of filters shall be from the inlet end. The unit must be on casters or wheels.
2. **Negative Air Machine Fan:** The fan rating must provide the air-moving capacity under actual operating conditions. Manufacturer's typically use "free-air" (no resistance) conditions when rating fans. The fan must be a centrifugal type fan.

3. **Negative Air Machine Final Filter:** The final filter shall be a HEPA filter. The filter media must be completely sealed on all edges within a structurally rigid frame. The filter shall align with a continuous flexible gasket material in the negative air machine housing to form an air tight seal. Each HEPA filter shall be individually tested and certified by the manufacturer to have an efficiency of not less than 99.97 percent when challenged with 0.3 mm dioctylphthalate (DOP) particles. Testing shall have been done in accordance with Military Standard MIL-STD-282 and Army Instruction Manual 136-300-175A. Each filter must bear a UL586 label to indicate ability to perform under specified conditions. Each filter shall be marked with the name of the manufacturer, serial number, air flow rating, efficiency and resistance, and the direction of test air flow.
4. **Negative Air Machine Pre-filters:** The pre-filters, which protect the final HEPA filter by removing larger particles, are required to prolong the operating life of the HEPA filter. Two stages of pre-filtration are required. A first stage pre-filter shall be a low efficiency type for particles 10 microns or larger. A second stage pre-filter shall have a medium efficiency effective for particles down to 5 microns or larger. Pre-filters shall be installed either on or in the intake grid of the unit and held in place with a special housing or clamps.
5. **Negative Air Machine Instrumentation:** Each unit must be equipped with a gauge to measure the pressure drop across the filters and to indicate when filters have become loaded and need to be changed. A table indicating the cfm for various pressure readings on the gauge shall be affixed near the gauge for reference or the reading shall indicate at what point the filters shall be changed, noting cfm delivery at that point. The unit must have an elapsed time meter to show total hours of operation.
6. **Negative Air Machine Safety and Warning Devices:** An electrical/ mechanical lockout must be provide to prevent the fan from being operated without a HEPA filter. Units must be equipped with an automatic shutdown device to stop the fan in the event of a rupture in the HEPA filter or blockage in the discharge of the fan. Warning lights are required to indicate normal operation; too high a pressure drop across filters; or too low of a pressure drop across filters.
7. **Negative Air Machine Electrical:** All electrical components shall be approved by the National Electrical Manufacturer's Association (NEMA) and Underwriter's Laboratories (UL). Each unit must be provided with overload protection and the motor, fan, fan housing, and cabinet must be grounded.

D. **HEPA Vacuums**

1. **All HEPA vacuums:** All electrical components shall be approved by the National Electrical Manufacturer's Association (NEMA) and Underwriter's Laboratories (UL). Each unit must be provided with overload protection and the motor and housing must be grounded.

B. **Testing of the HEPA Filtered vacuum HEPA filter:** The vacuum filter shall be a HEPA filter. The filter media must be completely sealed on all edges within a structurally rigid frame. The filter shall align with a continuous flexible gasket material in the HEPA vacuum housing to form an air tight seal. Each HEPA filtered vacuum

shall be individually tested and certified to have an efficiency of not less than 99.97 percent when challenged with 0.3 mm dioctylphthalate (DOP) particles. Testing shall have been done in accordance with Military Standard MIL-STD-282 and Army Instruction Manual 136-300-175A. Each filter must bear a UL586 label to indicate ability to perform under specified conditions. Each filter shall be marked with the name of the manufacturer, serial number, air flow rating, efficiency and resistance, and the direction of test air flow.

2.2 **ENCAPSULATING MATERIALS:**

A. **Types of Encapsulant:** The following four types of encapsulant must comply with performance requirements as stated in "Performance Requirements":

1. Removal encapsulant - used as a wetting agent to remove ACM.
2. Bridging encapsulant - provides a tough, durable coating on ACM.
3. Penetrating encapsulant - penetrates/encapsulates ACM at least 13 mm (½").
4. Lock down encapsulant - seals microscopic fibers on surfaces after ACM removal.

B. **Performance Requirements:** Encapsulant shall meet the latest requirements of EPA; shall not contain toxic or hazardous substances; or solvents; and shall comply with the following performance requirements:

1. **General Requirements** for all encapsulants:

a. ***ASTM E84:*** Flame spread of 25; smoke emission of 50.
b. ***University of Pittsburgh Protocol:*** Combustion Toxicity; zero mortality.
c. ***ASTM C732:*** Accelerated Aging Test; Life Expectancy 20 years.
d. ***ASTM E96 Permeability:*** Minimum of 0.4 perms.

2. **Bridging/Penetrating Encapsulant:**

a. ***ASTM E736 Cohesion/Adhesion Test:*** 24 kPa (50 lbs/ft2).
b. ***ASTM E119 Fire Resistance:*** 3 hours (Classified by UL for use on fibrous or cementitious fireproofing).
c. ***ASTM D2794 Gardner Impact Test; Impact Resistance:*** Minimum 11.5 kg-mm (43 in/lb).
d. ***ASTM D522 Mandrel Bend Test; Flexibility:*** No rupture or cracking.

3. **Lock down Encapsulant:**

a. ***ASTM E119 Fire resistance:*** 3 hours (tested with fireproofing over encapsulant applied directly to steel member).
b. ***ASTM E736 Bond Strength:*** 48 kPa (100 lbs/sq. ft.) (test compatibility with cementitious and fibrous fireproofing).

c. ***In certain situations,*** encapsulant may have to be applied to hot pipes or equipment. The encapsulant shall be able to withstand high temperatures without cracking or off-gassing any noxious vapors during application.

4. **The Project CIH** shall review and recommend approval for all encapsulating materials used under this contract, prior to submitting them to Architect for review, and prior to their use on site. Encapsulating materials (sealants) shall meet the latest requirements of the Environmental Protection Agency (EPA) and shall possess the characteristics outlined in paragraphs "Types of Encapsulant" and "Performance Requirements" above and the following:

a. ***Adherence:*** The sealant eliminates fiber dispersal by adhering to the fibrous substrate with sufficient penetration to prevent separation of the sealant from the sprayed asbestos material.
b. ***Impact Penetration:*** It withstands impact and penetration, protects the enclosed sprayed asbestos material, and it must not cause separation of sprayed asbestos material from its original substrate.
c. ***Flexibility:*** It possesses enough flexibility to accommodate atmospheric changes and settling of the structure over time.
d. ***Resistance to Smoke and Flame:*** It shall have high flame retardant characteristics and a low toxic fume and smoke emission rating.
e. ***Ease of Application:*** It must be easily applied with relative insensitivity to errors in preparation or application. Ease of repair by routine maintenance personnel is desirable.
f. ***Toxicity:*** The sealant must be neither noxious nor toxic to application workers and structure users thereafter.
g. ***Permeability:*** It should have some permeability to water vapor to prevent condensation accumulation be resistant to common cleaning agents.
h. ***Stability:*** It shall have suitable stability to weathering and aging.

C **Guarantee.** Guarantee encapsulating materials in accordance with Guarantee clause of the General Conditions.

PART 3 - EXECUTION

3.1 PREPARATION:

A. **Isolate the Work Area:** Place all tools, scaffolding, materials and equipment needed for working in the regulated area prior to erecting any plastic sheeting. Remove all uncontaminated removable furniture, equipment, and supplies from the regulated area before commencing work, or completely cover with two layers of 6-mil fire retardant poly sheeting and secure with duct tape. Lock out and tag out any HVAC systems in the regulated area. Seal off the perimeter to the regulated area to completely isolate the regulated area from adjacent spaces. All surfaces in the regulated area must be covered to prevent contamination and to facilitate clean-up. Should adjacent areas become contaminated, immediately stop

work and clean up the contamination at no additional cost to the Government. Provide firestopping and identify all fire barrier penetrations.

B. **Critical Barriers:** Completely separate the regulated area from adjacent areas using fire retardant poly at least 6 mils thick and duct tape. Individually seal with two layers of 6 mil poly and duct tape all HVAC openings into the regulated area. Individually seal all lighting fixtures, clocks, doors, windows, convectors, speakers, or any other objects or openings in the regulated area. Use care with hot/warm surfaces.

C. **Primary Barriers:** Clean all furniture, equipment, etc., with HEPA vacuum and wet cleaning prior to being moved or covered. Clean all surfaces in the regulated area with the HEPA vacuum and wet wiping before installing poly sheeting. Cover the regulated area with two layers of 6 mil fire retardant poly on the floors and two layers of 6 mil fire retardant poly on the walls, unless otherwise directed in writing by the AOC's representative. Floor layers must form a right angle with the wall and turn up the wall at least 300 mm (12 inches). Seams must overlap at least 1800 mm (6 feet) and must be spray glued and taped. Install sheeting so that layers can be removed independently from each other. Mechanically support and seal with duct tape and glue all wall layers.

1. **Stairs and Ramps:** If stairs and ramps are covered with 6 mil plastic, two layers must be used. Provide 19 mm (3/4") exterior grade plywood treads held in place with duct tape/glue on the plastic. Do not cover rungs or rails with any isolation materials.
2. **Carpeted Floors:** Carpeting shall be covered with three layers of 6 mil poly. Corrugated cardboard sheets or a ridge material approved by the AOC must be placed between the top and middle layers of the poly.
3. **Elevators:** Any elevator walls, floor, and ceiling must be covered with 2 layers of 6 mil fire retardant poly. The elevator door must be in a positively pressurized area outside the clean room of the Decontamination unit. At completion of the abatement work, the elevator must be cleaned as per this section.

D. **Secondary Barriers:** A loose layer of 6 mil poly shall be used as a drop cloth to protect the primary layers from debris generated during the abatement. This layer shall be replaced at the end of each work shift or as needed during the work.

E. **Extension of the Regulated Area:** If the enclosure of the regulated area is breached in any way that could allow contamination to occur, the affected area shall be included in the regulated area and constructed as per this section. If the affected area cannot be added to the regulated area, decontamination measures must be started immediately and continue until air monitoring indicates levels outlined in "Asbestos Control Area" for outside the work area, above, are met.

F. **Firestop Requirements:** Through penetrations caused by cables, cable trays, pipes, sleeves must be firestopped with a fire-rated firestop system providing an air tight seal. Firestop materials that are not equal to the wall or ceiling penetrated shall be brought to the attention of the AOC Fire Protection Division. The contractor shall list all areas of penetration, the type of sealant used, and whether or not the location is fire rated. Any discovery of

penetrations during abatement process shall immediately be brought to the attention of the AOC Fire Protection Division. All walls, floors and ceilings are considered fire rated unless otherwise determined by the AOC Fire Protection Division. Any visible openings whether or not caused by a penetration shall be reported by the contractor to the AOC Fire Protection Division for a sealant system determination. For firestops, contact the AOC Fire Protection Division for the opening size, penetration, and fire rating requirements.

G. **Pressure Differential:** The fully operational negative air system within the regulated area shall continuously maintain a pressure differential of minus 0.02 inch water column. Before any disturbance of any asbestos material, this shall be demonstrated to the AOC by use of a pressure differential meter/manometer as required by OSHA 29 CFR 1926.1101(e)(5)(i). The Competent Person shall be responsible for providing and maintaining the negative pressure and air changes as required by OSHA and this specification. In any AOC-occupied building or facility, the abatement contractor is responsible for providing twenty four (24) hour, seven (7) days a week observation of the negative pressure air system once asbestos removal starts. This observation shall continue until final air clearance criteria are met. The suspension of this requirement can only be approved by the AOC/SOHB. Instructions to be followed during the observations will be outlined during the CIH pre-abatement coordination meeting specified in Part 1 above.

H. **Monitoring:** The pressure differential shall be continuously monitored and recorded between the regulated area and the area outside the regulated area with a monitoring device that incorporates a strip chart recorder. The strip chart recorder shall become part of the project log and shall indicate at least minus 0.02 inch water column for the duration of the project.

I. **Supplemental Make-up Air Inlets:** Provide, as needed for proper air flow in the regulated area, in a location approved by the Project CIH, by making openings in the plastic sheeting to allow outside air to flow into the regulated area. Auxiliary makeup air inlets must be located as far from the negative air machines as possible, off the floor near the ceiling, and away from the barriers that separate the regulated area from the occupied clean areas. Cover the inlets with weighted flaps which will seal in the event of failure of the negative pressure system. The flap must be sprayed with adhesive to assure sealing if it closes.

J. **Testing the System:** The negative pressure system must be tested before any ACM is disturbed in any way. After the regulated area has been completely prepared, the decontamination units set up, and the negative air machines installed, start the units up one at a time. Demonstrate the operation and testing of the negative pressure system to the AOC/SOHB using smoke tubes and a negative pressure gauge to document the negative pressure and air flow. Testing must also be done at the start of each work shift.

K. **Demonstration of the Negative Air Pressure System:** The demonstration of the operation of the negative pressure system to the AOC/SOHB shall include, but not be limited to, the following:

1. **Plastic barriers** and sheeting move lightly in toward the regulated area.

2. **Curtains of** the decontamination units move in toward regulated area.
3. **There is a** noticeable movement of air through the decontamination units. Use the smoke tube to demonstrate air movement from the clean room to the shower room to the equipment to the regulated area.
4. **Use smoke tubes** to demonstrate air is moving air across all areas in which work is to be done. Use a differential pressure gauge to indicate a negative pressure of at least minus 0.02 inch across every barrier separating the regulated area from the rest of the building. Modify the system as necessary to meet the above requirements.

L. **Use of the Negative Pressure System During Abatement Operations:**

1. **Start units before** beginning any disturbance of ACM occurs. After work begins, the units shall run continuously, maintaining a minimum of 4 actual air changes per hour at a negative pressure differential of minus 0.02 inch water column, for the duration of the work until a final visual clearance and final air clearance has been completed.
2. **The negative air** machines shall not be shut down at any time during the duration of the project unless it has been authorized by the AOC/SOHB.
3. **Abatement work shall** begin at a location farthest from the units and proceed toward them. If an electric failure occurs, the Competent Person shall stop all abatement work and immediately begin wetting all exposed asbestos materials for the duration of the power outage. Abatement work shall not resume until power is restored and all necessary units are operating properly again.
4. **The negative air** machines shall continue to run after all work is completed and until a final visual clearance and a final air clearance has been completed for that regulated area.

M. **Dismantling the System:** After completion of the final visual and final air clearance has been obtained, the units may be shut down. The units shall have been completely decontaminated, all pre-filters removed and disposed of as asbestos waste, and the unit inlet and outlet sealed with 2 layers of 6 mil poly.

N. **Before the work is begun**, clean all removable items and equipment. Remove them from the work area and store as directed.

O. **Cover all non-removable items** and equipment in the work area with six (6) mil flame retardant plastic sheeting taped securely in place.

P. **When specified,** remove all heating, ventilation, and air conditioning system filters, pack them in sealable double approved disposal bags or containers for disposal in the approved waste disposal site and replace them with new filters upon completion of abatement. Openings created by the removal of HVAC filters shall be sealed using 6 mil plastic sheeting taped securely in place, prior to start of work.

Q. **Post warning signs**: on the primary containment as required by 29 CFR 1910.1001, 29 CFR 1926.1101, ASTM E 849, as directed by District of Columbia Title 20 DCMR, Section 800 “Control of Asbestos” and as directed by the Architect.

R. **Obtain Approval of the Finished Primary Containment** from the Project CIH, prior to starting any actual asbestos removal work.

3.2 **WORK PROCEDURE:**

A. **General Procedures:** The enclosed work areas shall be defined as an asbestos regulated area and all asbestos worker protection and work practices not addressed in this specification shall be performed in conformance with the general safety and health provisions of 29 CFR 1910.1001, 29 CFR 1910.20, and the construction industry standard for asbestos, 29 CFR 1926.1101, respectively. The Project CIH shall review work area air samples and make adjustments for the type of respiratory protection required. For asbestos abatement work, use general work practices, work practices for removal, and work practices for encapsulation as specified in 29 CFR 1926.1101. If a conflict arises, the more stringent application shall apply until a determination is made by the Architect.

B. **Protective Clothing:** Provide boots, booties, hard hats, goggles, clothing, respirators and any other personal protective equipment as determined by conducting the hazard assessment required by OSHA at 29 CFR 1910.132 (d). Provide all personnel entering the regulated area with disposable full body coveralls, disposable head covering, and 18 inch boot coverings. The Competent Person shall ensure the integrity of personal protective equipment worn for the duration of the project. Provide plastic/rubber disposable gloves for hand protection. Cloth type gloves may be worn under plastic/rubber gloves, but cannot be used alone. Duct tape shall be used to secure all suit sleeves to wrists and to secure foot coverings at the ankle.

C. **Local Exhaust System:** Provide a local HEPA filtered exhaust system in the asbestos control area. The local HEPA filtered exhaust system shall exhaust to the outside of the building. Local HEPA filtered exhaust equipment must be sufficient to maintain a negative air pressure of 0.02 inch of water anywhere in the asbestos control area. In no case shall the building ventilation system be used as the local exhaust system for asbestos control. Filtering in vacuums and exhaust equipment shall be HEPA filtered equipped and conform to ANSI Z9.2; HEPA filters shall be used in all vacuums and exhaust equipment. NOTE: Approval from the AOC/SOHB is required for all local HEPA filtered exhaust systems that cannot be exhausted directly outside the building. To exhaust an HEPA filtered local exhaust system from an asbestos control area to the inside an AOC building will require the approval of the AOC/SOHB. The HEPA filtered exhaust equipment shall also pass a Dioctylphthalate (DOP) test for HEPA filtered equipment each time a containment that is to be exhausted into the building is erected.

D. **Controlling Access to the Regulated Area:** Access to the regulated area is allowed only through the personnel decontamination facility (PDF). All other means of access shall be eliminated and OSHA Danger asbestos signs posted as required by OSHA. If the regulated area is adjacent to or within view of an occupied area, provide a visual barrier of opaque fire retardant poly sheeting at least 6 mils thick to prevent building occupant observation. If the adjacent area is accessible to the public, the barrier must be solid and capable of withstanding the negative pressure.

E. **Coordination of Work of all Trades:** Coordinate the work of all trades to assure that their work is performed in accordance with the applicable regulations and that the asbestos control limits are maintained at all times both inside and outside the asbestos work area.

3.3 WET REMOVAL OF ACM OTHER THAN AMOSITE ASBESTOS

A. **Adequately and** thoroughly wet the ACM to be removed prior to removal to reduce/prevent fiber release to the air. Adequate time must be allowed for the amended water to saturate the ACM. Abatement personnel must not disturb dry ACM. Use a fine spray of amended water or removal encapsulant. Saturate the material sufficiently to wet to the substrate without causing excessive dripping. The material must be sprayed repeatedly/continuously during the removal process in order to maintain adequately wet conditions. Removal encapsulant must be applied in accordance with the manufacturer's written instructions. Perforate or carefully separate, using wet methods, any outer covering that is painted or jacketed in order to allow penetration and wetting of the material. Where necessary, carefully remove covering while wetting to minimize fiber release. (Note: In no event shall dry removal occur except when a permit is granted for unavoidable safety hazards.)

B. **If ACM does** not wet well with amended water due to coating or jacketing, remove as follows:

1. **Mist work area** continuously with amended water whenever necessary to reduce airborne fiber levels.
2. **Remove saturated** ACM in small sections. Do not allow material to dry out. As material is removed, place the material, while still wet, into 6-mil poly asbestos waste bags. Twist tightly the bag neck, bend over (gooseneck) and seal with a minimum of three tight wraps of duct tape. Clean/decontaminate the outside of any residue and move to wash down station adjacent to EDF.
3. **Fireproofing or Architectural Finish on Scratch Coat:** Spray with a fine mist of amended water or removal encapsulant. Allow time for saturation to the substrate. Do not over saturate causing excess dripping. Scrape material from substrate. Remove material in manageable quantities and control falling to staging or floor. If the falling distance is over 20 feet (6M), use a drop chute to contain material through descent. Remove residue remaining on the scratch coat after scraping is done using a stiff bristle hand brush. If a removal encapsulant is used, remove residue completely before the encapsulant dries. Re-wet the substrate as needed to prevent drying before the residue is removed.
4. **Fireproofing or Architectural Finish on Wire Lath:** Spray with a fine mist of amended water or removal encapsulant. Allow time to completely saturate the material. Do not over saturate causing excess dripping. If the surface has been painted or otherwise coated, cut small holes as needed and apply amended water or removal encapsulant from above. Cut saturated wire lath into 2 by 6 feet (50 by 150 mm) sections and cut hanger wires. Roll up complete with ACM, cover in burlap and hand place in disposal bag. Do not drop to floor. After removal of lath/ACM, remove any over spray on decking and structure using stiff bristle nylon brushes. Depending on hardness of over spray, scrapers may be needed for removal.

5. **Pipe Insulation:** Remove the outer layer of wrap while spraying with amended water in order to saturate the ACM. Spray ACM with a fine mist of amended water or removal encapsulant. Allow time to saturate the material to the substrate. Cut bands holding pre-formed pipe insulation sections. Slit jacketing at the seams, remove and hand place in a disposal bag. Do not allow dropping to the floor. Remove molded fitting insulation/mud in large pieces and hand place in a disposal bag. Remove any residue on pipe or fitting with a stiff bristle nylon brush. In locations where pipe fitting insulation is removed from fibrous glass or other non-asbestos insulated straight runs of pipe, remove fibrous material at least 6 inches from the point it contacts the ACM.

3.4 WET REMOVAL OF AMOSITE ASBESTOS

A. **Amosite ACM** will require local exhaust ventilation and collection, as described below, in addition to wet removal. Provide specific description /locations/drawings.

B. **Provide local** exhaust ventilation and collection systems to assure collection of amosite fibers at the point of generation. A 12-inch flexible rigid non-collapsing duct shall be shall be located no more than 2 feet from any scraping/brushing activity. Primary filters must be replaced every 30 minutes on the negative air machines. Each scraping/brushing activity must have a negative air machine devoted to it. For pre-molded pipe insulation or cutting wire lathe, attach a 4-foot square flared end piece on the intake of the duct. Support the duct horizontally at a point 2 feet below the work to effect capture. One person in the crew shall be assigned to operate the duct collection system on a continual basis.

C. **Amosite asbestos** does not wet well with amended water. Submit full information and documentation on the wetting agent proposed prior to start for review by the AOC/SOHB representative. Insure that the material is worked on in small sections and is thoroughly and continuously wetted. Package immediately after removal while wet. Remove as required.

3.5 REMOVAL OF ACM/DIRT FLOORS AND OTHER SPECIAL PROCEDURES

A. **Major Abatement on Dirt Floors:** When working on dirt floors, pick up all chunks of visible asbestos debris using wet methods if possible after set-up of PDF, EDF, negative air systems as required. Perform work and decontaminate/clean-up; perform lock-down as needed and complete work as required under these specifications. The asbestos contaminated soil (ACS) shall be removed, encapsulated, and enclosed.

1. **Remove ACS** to a minimum depth of 2 inches. After wetting to minimize dust, shovel dirt into disposal bags. The Project CIH shall closely monitor work conditions and take appropriate action to protect workers from exposure to asbestos and heat stress. The minimum number of air changes per hour shall be six using negative air machines.
2. **The Contractor** has the option to encapsulate soil. A test area of a minimum of 100 sq. ft. must be performed to determine feasibility. Provide a written proposal for encapsulation to the AOC/SOHB representative with test results; recommendation from the manufacturer; a guarantee of performance for 10 years; and any limitations of application. The AOC reserves the right to accept or reject the application proposal

with no effect on the contract. If approved, the application and supervision must be done by persons certified by the manufacturer as trained and experienced personnel as evidenced by documentation of such.

3. **Enclosure of ACM** using a concrete layer of 2 inches over the entire surface may also be done. Thoroughly dampen soil first before pouring concrete. Personnel shall be proficient in concrete laying as well as asbestos trained.

3.6 NEGATIVE PRESSURE GLOVEBAG METHOD OF ASBESTOS REMOVAL:

A. **General:** The glovebag method may be used where the total length of asbestos insulation to be removed in a pipe segment between existing ACM insulation to remain does not exceed 3 feet. The glovebag method may not be used for steam, steam condensate return and heating water piping unless the system is inactive or the surface temperature of the pipe is below 140 degrees F. Respiratory protection and disposable clothing are required. Discard clothing in accordance with paragraph Disposal of Friable Asbestos.

B. **Procedure:** Install the glovebag and negative pressure equipment following all procedures outlined in OSHA's 29 CFR 1926.1101.

C. **Removal and Disposal of Glovebags:** Removal of glovebags shall be in accordance with 29 CFR 1926.1101. Dispose of glovebags, material, and contaminated equipment in accordance with paragraph Disposal of Friable Asbestos.

3.7 MINI-ENCLOSURE SYSTEM

A. **General:** A mini-enclosure system is defined as any portable system capable of performing small scale short duration projects equipped with all aspects of a full containment. This includes, but is not limited to the following components: negative air pressure, shower or water-tank facilities, HEPA vacuums, and polyethylene sheeting barriers.

B. **A mini-enclosure** system may be used when minor disturbances to asbestos-containing ceiling, wall, or floor materials are required and when the ceiling, wall or floor surface is flat and capable of obtaining the required air seal. Mini-enclosures shall not exceed a projected floor area of thirty square feet unless approved by the Architect. This system applies to the following activities:

1. **Removal** of non-asbestos lay-in ceiling panels with asbestos debris on the top ceiling panel surface.
2. **Removal** of asbestos-containing lay-in or spline ceiling panels.
3. **Removal** of light fixtures in plaster ceilings to access ceiling spaces.
4. **Removing** or installation of light fixtures.
5. **Cutting or channeling** of walls and plaster ceilings (e.g., hanging conduit or other such projects necessitating disturbance to the asbestos surfaces).
6. **Removal** of asbestos-containing floor tile and mastic.
7. **Removal** of asbestos-containing duct mastic.
8. **Removal** of transite asbestos panel boards, baseboard and mastic.

B. **Procedure**: Utilize a negative pressure mini-enclosure system for this work. This process will follow all procedures outlined in OSHA's 29 CFR 1926.1101. The following steps are to be when performing this work:

1. **Preliminary setup:** Seal all critical barriers (e.g., doors, windows, vents) in the work area. Place OSHA warning signs as necessary facing outward on perimeter doors. Pre-clean area beneath work by wet wiping and HEPA vacuuming. Place drop cloth on surfaces below work and seal ir to floor with duct tape. Disconnect, as necessary, the electric and lock out power to breaker. Check and pressurize water within holding tanks and nozzles on the enclosure system. Provide ground-fault protection for other outlets.
2. **Preliminary Inspection:** Project CIH will inspect area prior to commencement of work. Verify that all preliminary set-up procedures, as stated above, have been completed. Verify that all filters are properly positioned in HEPA vacuums and negative air machines (NAM). Verify all equipment is operating properly. Review, with contractor, the CIH Approved Plan of Action specified in "Submittals" in Part 1 of this specification.
3. **Work Procedures:** Workers will don two (2) suits, gloves and appropriate respiratory protection in accordance with 29 CFR 1910.134. Workers will activate the negative air system associated with the mini-enclosure. The workers, in accordance with all applicable Federal and District of Columbia regulations, will perform necessary removal and/or encapsulation of asbestos containing material. Non-asbestos containing material to be salvaged, as stated in scheduled work plan, shall be properly decontaminated prior to its removal from the work area.
4. **Waste Removal:** All asbestos containing materials shall be sufficiently wet and placed in bags, drums, or other approved and labeled disposal containers. All waste disposal containers shall be properly decontaminated. Disposal shall be performed as specified in "Cleanup and Disposal" below.
5. **Decontamination Procedures:** Thoroughly clean via wet wiping and HEPA vacuuming all surfaces within the mini-enclosure so that no visible residue remains. Workers will decontaminate by HEPA vacuuming the outer protective suit. Workers will reinspect the area for visible residue, clean as necessary, then decontaminate the inner protective suit. Once entire area is completely decontaminated, the workers may remove and properly dispose of the second suit and shower. Once showered, the worker may exit the mini-enclosure system and remove respiratory protection. If a remote shower facility is utilized, the workers shall follow the same procedure as stated above, however, the second suit shall be removed upon entering the remote shower facility.
6. **Final Visual Inspection:** Once all work for the specified area has been completed and workers have exited the mini-enclosure system, the Project CIH will enter the enclosure system to perform a final visual inspection to insure that there is no visible residue and all work has been completed.
7. **Final Air Sample Clearance:** The following final clearance sampling procedure shall be followed for mini-enclosure systems. If the work area passes final visual inspection, a final clearance air sample shall be conducted by the Project CIH inside the mini-enclosure system. The clearance air sample will have a total volume of at

least 1200 liters of air and shall be analyzed by Phase Contrast Microscopy (PCM) following the NIOSH 7400 method A rules. This sample shall be read on-site by the Project CIH. Upon failure of the clearance sample by PCM analysis, another sample shall be conducted and analyzed by Transmission Electron Microscopy (TEM) and submitted to an accredited laboratory with all extra cleaning and sampling at no cost to the Government.

8. **Post-Clearance:** Upon clearance of the mini-enclosure system both by visual and air sampling, the system can be used at another location, leaving the previous work area non-hazardous for other trades to perform routine work.

3.8 QUALITY CONTROL:

A. **Monitoring:** Monitoring of airborne concentrations of asbestos shall be in accordance with 29 CFR 1910.1001, 29 CFR 1926.1101, ASTM E 849, and this specification.

1. **Monitor the airborne concentration** of asbestos before constructing the containment work area, to obtain a baseline fiber concentration in the affected areas. If the baseline air monitoring results, exceeds 0.01 f/cc immediately notify the AOC/SOHB.
2. **Monitor continuously** during the course of the work inside the asbestos work area and other areas as directed by the Project CIH's air sampling strategy. In addition to that sampling strategy, and at a minimum, perform daily monitoring outside the entrance to the asbestos work area, along each perimeter wall of the containment and at the exhaust opening of the local exhaust system. If monitoring shows airborne concentrations greater than the asbestos control limits permitted by this specification, immediately stop all work, and notify the AOC/SOHB. Work shall not be restarted without approval of the Project CIH and the AOC/SOHB.
3. **In addition,** monitor the airborne concentrations of asbestos after final cleanup and removal of the enclosure of the asbestos control area in accordance with paragraph "Final Cleanup and Removal of Enclosures."

B. **Site Inspection and Stop Work Orders:** While performing asbestos abatement work, the Contractor shall be subject to on site inspection by agency officials or agency contracted inspection services. Work shall also be subject to inspection by OSHA and EPA inspectors and/or local building or health officials. If found to be in violation by one of these officials, the Contractor shall cease all work immediately. Until the violation is resolved, standby time required to resolve the violation shall be at the Contractor's expense. Five complete sets of equipment (such as respirators and disposable clothing) required for entry to the asbestos control area shall be available for inspectors use.

3.9 CLEANUP AND DISPOSAL:

A. **Permits and Notifications:** Secure necessary permits in conjunction with asbestos removal, hauling and disposition and provide timely notification of such actions, as may be required by Federal, state, regional, and local authorities. When required by regulation, ensure that notification to the Regional Office of the EPA and the responsible agency for the District of

Columbia is made,; provide copies of the notification to the AOC/SOHB 20 days prior to the commencement of the work. Provide notification in accordance with 40 CFR 61.22(d)(1).

B. **Housekeeping:** Essential parts of asbestos dust control are housekeeping and cleanup procedures. All surfaces throughout the containment work area shall be maintained free of accumulations of asbestos fibers to prevent further dispersion. Give meticulous attention to restricting the spread of dust and debris, keep waste from being distributed over the general area. Use approved industrial vacuum cleaners with a HEPA filters to collect dust and small scrap. The use of compressed air is forbidden. Post appropriate asbestos hazard warning signs. At the end of each work shift, the containment area shall be cleaned. Equip personnel engaged in cleaning up asbestos scrap and waste with necessary respiratory equipment and protective clothing.

C. **Disposal of Friable Asbestos:** Collect and dispose of friable asbestos waste, scrap, debris, bags, containers, equipment, and asbestos-contaminated clothing which may produce airborne concentrations of asbestos fibers in disposal bags or containers approved as specified in Part 1 above for post-award submittals. Prior to placing in bags or containers, thoroughly wet down asbestos wastes to reduce airborne concentrations. All asbestos waste shall be double bagged, wrapped or contained in accordance with 40 CFR Subpart M. At the end of each work shift, all waste asbestos materials shall be removed from the containment. Obtain approval from the AOC/SOHB and affected AOC building Superintendent's office, when the removal of the containerized asbestos waste is scheduled from the containment area. The contractor shall make arrangements for the transportation and disposal of all asbestos waste generated under this specification in accordance with all Federal regulations at a sanitary landfill that meets EPA requirements. The Contractor will provide the AOC/SOHB with a copies of all Waste Shipment Records, hauler's receipts, and landfill receiving tickets resulting from the disposal of the asbestos waste as specified in Part 1 above for disposal receipt submittals. Establishment of any on-site temporary holding area for properly packaged asbestos waste must have prior approval from the AOC/SOHB. At no time shall the Contractor receive any asbestos-containing waste from other jobs, compliance inspectors or other sources without prior approval from the AOC/SOHB.

D. **Final Cleanup:** The Contractor shall notify the AOC/SOHB and the Project CIH that the work area is ready for final inspection. The Project CIH shall inspect the work area prior to performing final air sampling. Visual observation of asbestos materials, dust or debris is not permitted on any surface in or around the work area. Clean work area in accordance with EPA approved methods. Once the visual observation is satisfied apply a lock down encapsulant.

E. **Lock down encapsulation:** Lock down encapsulation is an integral part of the ACM removal. At the conclusion of ACM removal and before final air sampling, all surfaces shall be encapsulated with a lock down encapsulant. Apply two coats of encapsulant in strict accordance with the manufacturer's instructions. Any deviation from the instructions must be approved by the AOC's representative in writing prior to commencing the work. Apply the first coat of encapsulant with an airless sprayer at a pressure and using a nozzle orifice as recommended by the manufacturer. If the surface has been allowed to dry, wet wipe or

HEPA vacuum prior to spraying with encapsulant. Apply a second coat over the first coat in strict conformance with the manufacturer's instructions. Color the encapsulant and contrast the color in the second coat so that visual confirmation of completeness and uniform coverage of each coat is possible. Adhere to the manufacturer's instructions for coloring. At the completion of the encapsulation, the surface must be a uniform third color produced by the mixture.

1. **Exposed Edges**: Seal edges of ACM exposed by removal work such as ACM left due to being outside the scope of work for this contract, or is inaccessible such as a sleeve or wall penetration, with one coat of penetrating encapsulant and one coat of bridging encapsulant. Prior to sealing, permit the exposed edges to dry completely in between the coats to permit penetration of the encapsulant.

F. **Final Air Sampling:** Perform air sampling for clearance purposes in accordance with current District of Columbia or State of Maryland regulations, as applicable. Copies of the clearance air sample results are to be faxed to the District of Columbia Department of Health, Air Quality Division or Sate of Maryland, as applicable.

G. **Removal of Enclosure:** If asbestos concentrations do not exceed clearance criteria, contact the AOC/SOHB for authorization for the removal of the enclosure. Ensure that copies of the clearance air sample results are telefaxed to the District of Columbia Department of Health, Air Quality Division.

H. **Re-Occupancy Inspection:** The Contractor shall notify the AOC/SOHB and the Project CIH that the work area is ready for re-occupancy inspection. The Project CIH, shall inspect the work area after removal of the enclosure and shall ensure that no visible debris is observed. If visible debris is observed, the Contractor shall clean the work area as directed by the Project CIH, in accordance with EPA approved methods until no visible debris are observed. The Project CIH shall provide verbal re-occupancy approval to the AOC/SOHB immediately after this inspection. Documentation of the re-occupancy inspection shall be provided to the AOC/SOHB within 24 hours after approving an area for re-occupancy.

3.10 SCHEDULE OF MINIMUM PROCEDURES FOR SPECIFIC AREAS

A. **Areas are identified on the drawings.** Plan asbestos removal work and field verify actual extent of areas where each procedure is required. Architect shall survey areas and approve work plans; notify Architect no less than 7 days in advance. Unit prices shall be used to adjust changes to the Contract Sum.

B. **Scheduled procedures** are minimum requirements for each type and location of asbestos removal; additional tasks and procedures may be required by individual field conditions or directed by Architect or CIH.

C. **Develop procedures** for the following work items:

1. Areas to remove baseboard molding with asbestos-containing mastic.

2. Areas to remove asbestos-containing duct insulation to permit new duct connections or rerouting existing ducts.
3. Areas to remove asbestos-containing pipe insulation to permit new pipe connections or rerouting existing pipes.

END OF SECTION 028213

Order of the Architect of the Capitol

Date: April 11th, 2008

Subject: Architect of the Capitol, Capitol Power Plant (CPP) Utility Distribution System (UDS) Access Control Policy.

Purpose: The purpose of this policy is to provide guidance to and define access control procedures for all persons requiring access to the utility distribution system (including tunnels and vaults) managed by the Capitol Power Plant.

Applicability: This policy applies to all UDS Entrants who require access to the CPP utility distribution system tunnels and vaults.

Effective Date: Immediately.

Scope: All utility distribution system tunnels and vaults in the Capitol Complex managed by the Capitol Power Plant

Supersedes: None

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Architect of the Capitol
Capitol Power Plant
Utility Distribution System Access Control Policy

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Architect of the Capitol
Capitol Power Plant
Utility Distribution System Access Control Policy

A. Purpose:

The purpose of this policy is to define access control procedures for all persons requiring access to the utility distribution system (including tunnels and vaults) managed by the Capitol Power Plant (CPP).

B. Definitions:

Access Authorization - Approval granted by the CPP for an individual to be allowed to enter the utility distribution system tunnels and vaults (system). Each individual will be required to provide necessary documentation to be granted Authorization. There are two levels of Access Authorization: "Escort Required" and "Unescorted."

Entry Authorization - Approval granted by CPP for each entry into the UDS system. Entry will not be allowed without prior Access Authorization.

"Escort Required" entrant - Individual authorized by CPP to enter into the utility distribution system tunnels and vaults but requires an escort to do so. "Escort Required" individuals are not provided the ability to pass through doors secured with a magnetic card reader.

Jurisdiction - For the purposes of this policy, Jurisdiction is any organization or entity that requires tunnel access. The term Jurisdiction includes, but is not limited to, any Legislative Branch Agency, contractor, or AOC organization except CPP.

PRCS -Permit Required Confined Space.

"Unescorted" entrant - Individual authorized by CPP to enter into the utility distribution system tunnels and vaults without requiring an escort. "Unescorted" individuals receive Access Authorization from the CPP and are then provided access by the United States Capitol Police to pass through all doors secured with a magnetic card reader. Unescorted entrants can serve as escorts for Escort Required entrants.

Note: The U.S. Capitol Power Plant Utility Distribution System generally consists of five separate tunnels that deliver utilities such as steam, chilled water and communications lines to various buildings in and around the U.S. Capitol campus.

C. Scope:

All utility distribution system tunnels and vaults in the Capitol complex managed by the U.S.

Capitol Power Plant.

D. Background:

This document provides specific procedures for accessing the utility distribution system tunnels and vaults managed by the Capitol Power Plant (CPP). Due to security requirements and potentially hazardous conditions that exist within certain areas of the distribution system, access must be strictly controlled and monitored to ensure the safety of tunnel and vault entrants.

E. Objective:

This Utility Distribution System Access Control Policy is provided by the Capitol Power Plant (CPP) to provide access to those authorized to enter the tunnels and vaults controlled by CPP. This policy will help ensure that those individuals who enter the tunnels are properly qualified to do so and are aware of any current hazards that may exist within the UDS.

F. Responsibilities and Actions:

1. Director, Utilities and Power Plant

a. Ensures required policies and procedures are in place and followed by all tunnel entrants.
b. Ensures management tools are in place to communicate the policy to all parties, implement the policy, audit the policy and take corrective actions when needed.
c. Notifies Jurisdictions or other agencies when individuals are found to be in violation of the provisions of this policy.
d. Notifies the appropriate COTR when contract employees are found to be in violation of the provisions of this policy.
E. Ensures coordination with other affected authorities to ensure comprehensive application of this policy.
F. Ensures scheduling, coordination and support of projects requiring UDS entry.

2. CPP Tunnel Safety Specialist (TSS)

a. Ensures compliance with this policy by reviewing Jurisdiction submitted Utility Distribution System Access Authorization Request Forms (Attachment A) and supporting documentation and approving Access Authorization when documentation is found acceptable.
b. Maintains a record of all Request Forms, supporting documentation and dispositions.
c. Ensures all entrants fill out a PRCS permit with all required information.
d. Maintains a copy of the completed Utility Distribution System Access Authorization Request Form from the requester.
e. Maintains the CPP List of Authorized "Escort Required"/"Unescorted" entrants;

notifies United States Capitol Police of additions and deletions to the list, and notifies Jurisdiction of additions or deletions.

f. Maintains record of all Permit Required Confirmed Space (PRCS) permits received.
g. Conducts monthly documentation review of CPP entry/access requirements.
h. Verifies tunnel entrants training requirements are current before allowing tunnel entry.
I. Ensures all individuals planning to perform utility tunnel work have been authorized for tunnel entry.

3. Jurisdiction Superintendents, Contracting Officer Representatives, and Project Managers

a. Ensures tunnel authorization is controlled by restricting Access Authorization requests to only those who need to access the Utility Distribution System.
b. Ensures all Jurisdiction tunnel entrants requiring entry into the tunnel/vault have received required training (section I).
c. Requests Access Authorization (Attachment A) for only those tunnel entrants requiring entry into the CPP Utility Distribution System and have provided the required supporting documentation for tunnel/vault entry. Authorization will automatically expire on the date indicated on the Access Authorization Request Form.
D. Ensures all entrants meet and comply with the requirements of this policy.

4. Confined Space Supervisor

a. Ensures the PRCS Permit is filled out properly and submitted.
b. Ensures all entrants are equipped with a radio compatible with the existing communication system.

Caution – Cell phones may not operate properly in the UDS tunnels and vaults.
Use only AOC compatible issued radios for communications.

c. Ensures each entrant is equipped with all required personal protective equipment (PPE).
d. Ensures, prior to entry, that each entrant is briefed on safe work practices and currently known tunnel conditions. Emphasizes that care shall be taken so as to minimize disturbance to dust, debris, asbestos containing materials, or protective asbestos covers.
e. If the asbestos is disturbed, ensures entrants follow the procedures outlined in 29 CFR 1910.1001, 1926.1101.
f. Ensures a PRCS Form is completed (see Table 1) and sent to the Point of Contact (POC) within 24 hours after entry.

Table 1: Permit Required Confined Space Form Requirements

Individual	PRCS Form
AOC	CPP Confined Space Entry Permit
Legislative Branch, non-AOC	Agency form or AOC CPP Confined Space Entry Permit[1]
Contractor	Contractor generated OSHA compliant form
Other	Self generated OSHA compliant form

5. Authorized "Unescorted" Entrant

a. Shall meet and comply with the requirements of this policy.
b. Shall notify CPP and receive approval for all planned tunnel/vault entries in accordance with section L.
c. Shall notify CPP of any and all persons found to be in violation of this policy.

6. Authorized "Escort Required" Entrant

a. Shall meet and comply with the requirements of this policy.
b. Shall request tunnel/vault entry in accordance with the procedures of section L.
c. Shall notify CPP of any and all persons found to be in violation of this policy.

7. Escorts

a. Escorts are responsible for ensuring personnel being escorted comply with all applicable safety regulations, CPP and AOC safety procedures. In addition, escorts have the authority to terminate the entry activity ask "Escort Required" entrants to exit if compliance becomes an issue.

G. Applicable Regulatory Requirements:

All PRCS supervisors, "Escort Required", and "Unescorted" entrants shall, at a minimum, comply with applicable OSHA Standards, including but not limited to:

1910.134 Respiratory Protection
1910.132 Personal Protective Equipment
1910.146 Permit Required Confined Space
1910.1000 General Industry Asbestos Standard
1926.1101 Construction Asbestos Standard

[1] Non-AOC legislative branch agencies may use AOC CPP Confined Space Entry Permit form. By allowing others to use the AOC form, AOC does not assume responsibility for others compliance with OSHA and CAA standards. That compliance responsibility remains with the Legislative Branch Agency.

H. Personal Protective Equipment:

At a minimum, all tunnel entrants planning to perform work in the Utility Distribution System will use the required Personal Protective Equipment (PPE) as designated by the CPP Director, Deputy Director, UDS TSS or designee for the conditions of the tunnel or vault to protect themselves from potential injury.

Required minimum PPE shall be listed daily in the U.S. Capitol Power Plant Tunnel System Permit Required Confined Space Entry Tunnel Briefing Report.

Tunnels and vaults may contain asbestos containing materials (ACM) and/or presumed asbestos containing materials (PACM). Refer to the daily US CPP Tunnel System Permit Required Confined Space Entry Tunnel Briefing Report for current tunnel status. For tunnels and vaults requiring respiratory protection, all tunnel entrants entering the tunnels or vaults are required to wear, at a minimum, the following additional personal protective equipment:

Half-Face Respirator w/P-100 cartridges
Disposable coveralls with hood and boot coverings
Disposable gloves

Note: AOC personnel required to enter areas of active asbestos abatement shall wear a full-face PAPR.

I. Training Requirements:

There are a number of hazardous conditions within the utility distribution system that result in the following minimum mandatory training requirements prior to tunnel and vault entry:

1. All tunnels and vaults are classified as permit-required confined spaces. Therefore, confined space training in accordance with 29 CFR 1910.146 is required.

2. Respiratory protective equipment and disposable coveralls are required for entry into portions of the tunnel and vault systems as noted on the daily tunnel briefing report due to the presence of asbestos containing insulations and/or dust. Annual respirator training, annual respirator fit-testing, and annual medical surveillance are required for entry into these areas in accordance with 29 CFR 1910.134. Note: Ongoing asbestos activities will gradually eliminate the need for respirators and will lower the level of personal protective equipment and training required to access these areas.

3. Some areas of the tunnel and vault ceilings and walls are spalling and delaminating, requiring use of hard hats and protective foot wear. Therefore, personal protective equipment training in accordance with 29 CFR 1910.132 is required.

4. Temperatures in some areas of the tunnels and vaults may reach upwards of 160° F. Therefore, heat stress awareness and prevention training is required. Note: AOC

employees shall be briefed on the CPP Heat Stress Prevention Program. Non-AOC Legislative Branch agencies may follow this program or develop their own program. Contractors are required to develop their own program.

5. Asbestos containing thermal system insulation may be present in some portions of the UDS. At a minimum, asbestos awareness training in accordance with 29 CFR 1910.1001 is required for entrance into the UDS.

J. Record Keeping:

All Jurisdictions and Contractor PRCS records required by this policy will be filed by the CPP TSS.

K. Access Authorization Request Procedures:

Access authorization shall be requested and received before first entry into the tunnels/vaults. Attachment B is a flowchart describing an overview of the procedure to gain authorization for tunnel access.

1. The Jurisdiction Superintendent/COR/COTR/PM/Supervisor ("requestor") submits completed request form (Attachment A) and supporting documentation to the CPP TSS for Access Authorization.

2. The following records should be submitted with the CPP Access Authorization Request Form (Attachment A):

   - Annual Medical Approval for Respirator Use
   - Annual Respirator Fit Testing Record
   - Annual Initial or Refresher Respirator Training Certificate
   - Current Asbestos Training Certificate
   - Permit Required Confined Space Training Certificate
   - Annual Heat Stress Prevention Training Certificate

3. The CPP TSS reviews the form and training documentation for approval. If approved, the CPP TSS determines if individual will be granted "Escort Required" access or "Unescorted" access.

4. The CPP TSS shall inform the Jurisdiction about the approval or disapproval and the level of access authorization granted.

   a. If "Unescorted" access is authorized, the CPP TSS notifies the U.S. Capitol Police to provide the individual magnetic card reader access. Once this is completed, the individual has card reader access to the tunnel doors and gates and does not require escort.
   b. "Escort Required" entrants are required to have a CPP employee or authorized

"unescorted entrant" with them at all times.

5. The CPP TSS shall maintain a list of all authorized tunnel entrants.

L. Entry Authorization Request Procedures:

Attachment C is a flowchart describing an overview of the procedure to request entry authorization.

Once tunnel authorization is received:

1. "Escort required" entrants require escort and shall request entry at least 48 hours in advance of entry. If the tunnel entrant requires a CPP escort, they shall complete the United States Capitol Power Plant Tunnel Entry Support Form (Attachment G) five days before entry.

2. Only persons familiar with tunnels and current procedures are granted "Unescorted" access authorization.

    a. CPP reviews the access authorization list to confirm personal familiarity with the tunnel system.
    b. All Access Authorization Request Forms for "Unescorted" shall be approved by the CPP TSS.

3. "Unescorted" entrants do not require an escort but do require approval for unescorted entry from the TSS.

    a. Once "Unescorted" authorization is received, the tunnel entrant's ID will allow access to the tunnels/vaults. To gain access to the tunnels, the approved individual holds their badge up to the card reader red light. The red light should turn green and allow the individual to enter the door or gate.
    b. Some doors or gates will have an intercom connected to the Capitol Police office. For identification purposes press the intercom button and identify yourself to the Capitol Police contact. The Capitol Police officer will answer and release the door for entry.

M. Access Authorization Revocation:

1. It is the responsibility of each Jurisdiction to ensure all employees and contractors planning to perform tunnel work comply with established access and safety procedures. Failure to comply will result in work stoppage and removal from the CPP UDS.

2. When an unauthorized entry or non-compliant work activity is recognized, it shall be immediately reported to the CPP Director of Utilities and CPP TSS. The Director will notify the responsible Jurisdiction/Agency/Contractor and request immediate corrective

action.

N. General Requirements to Enter Tunnels:

1. All work in the Capitol Power Plant UDS shall comply with OSHA 1910.146 Permit Required Confined Space and all applicable safety standards.

2. Where work tasks will be performed in a specific location for an extended period of time, and involve activities that could cause loose concrete to fall, the tunnel entrant(s) shall notify the CPP Director or Deputy Director and a pre-work structure inspection shall be performed by a structural engineer or trained designated representative. If necessary, loose concrete shall be removed prior to the start of work task.

3. Prior to tunnel entry, all entrants shall complete the applicable Confined Space Entry Permit (Attachment D).

4. There is a leaky cable communications antenna system within the tunnels to enable radio communications. All entrant teams shall be equipped with a radio compatible with the installed leaky cable system or provide alternate means of communication demonstrated to work within the tunnel system and approved by the UDS TSS.

5. Temperatures in some of the tunnels may reach upwards of 160 degrees F. All entrants shall be informed about the dangers and preventive measures for heat stress. AOC employees shall be briefed on and comply with the CPP Heat Stress Prevention Procedures by the appropriate Jurisdiction Safety Specialist or designee. Contracting Officer Representatives (CORs), Contracting Officer Technical Representatives (COTRs), and Project Managers (PMs) shall brief contractors that enter the CPP tunnel system on the tunnel conditions and the Contractors shall be required to have Heat Stress Prevention Procedures in place prior to entering the tunnels.

6. One attendant and at least two entrants are required for tunnel/vault entry. Two entrants are not required in manholes where two people can not be reasonably expected to fit. When only one entrant is to enter the manhole, the attendant shall maintain visual contact with the entrant at all times. A tripod rescue cable shall be attached to the single entrant's full body harness while in the manhole. All manholes are to be pumped clear of accumulated water prior to entry and the manhole cover shall remain open at all times that the entrant is in the manhole.

7. When a tunnel entrant has reason to believe asbestos has been disturbed in the CPP UDS, notification shall be forwarded to the CPP TSS.

8. Within 24 hours of when the tunnel visit is complete, entrants shall fax a copy of the applicable Confined Space Entry Permit to the CPP.

9. Each tunnel entry group must notify the GPO Police at (202) 512-1320 at least 1 hour

prior to entering or exiting the Y tunnel at YD-9. Similarly, each tunnel entry group must notify the Office of the Supreme Court Facility Manager prior to entry into the G tunnel.

10. All tunnel entrants shall be briefed daily on existing tunnel hazards and restrictions prior to entry.

    a. All Escorts and PRCS Supervisors shall attend the 6:00 AM daily briefing at the CPP. Briefing shall review tunnel conditions and locations of daily entrants. CPP will issue a copy of a Safety Briefing Checklist (Attachment E) to all attendants and will maintain a status of current and special requirements, conditions and entrants.
    b. Tunnel Escorts and PRCS Supervisors shall brief each entrant prior to entering the tunnels using the U.S. Capitol Power Plant Tunnel System Permit Required Confined Space Entry Tunnel Briefing Report and their notes from the 6:00 AM briefing.
    c. Entry Supervisors who cannot attend the daily briefings shall make arrangements with their AOC project manager to receive a daily briefing prior to entry.

11. The CPP is designated the central control point to control access and track tunnel entrants and to provide awareness of the numbers of persons and locations in the tunnels at any given time in the event of an emergency. All Escorts and Entry Supervisors will sign a log book with name, phone number, radio number, tunnel location, and number of entrants prior to entry into the tunnel system.

12. Restricted areas within tunnels are clearly marked and signage is posted indicating access is not authorized.

    a. "Tunnel Closed" signs are posted as appropriate when sections of the tunnel are closed. Entrants may not pass a "Tunnel Closed" sign unless specifically granted approval to do so by the CPP Director, Deputy Director, TSS or Designee.

13. All painted surfaces within the UDS are to be considered Lead Based Paint. Any activity that could disturb painted surfaces shall comply with the CPP Lead Compliance Program.

14. Due to the design of the pipes and components in the steam and chill water distribution system, travel through the tunnels may be obstructed by valves, pipes and associated operational components. Additionally, the structural design of some locations of the UDS creates travel and work areas that may have reduced vertical or lateral clearances. Entrants shall use caution to see and avoid obstacles and obstructions while performing operations within the UDS.

15. The current operational design and maintenance of the steam and chill water distribution system may require venting steam and draining condensate or chill water. Additionally, rain water and ground water drains into the UDS. Several sump pumps are permanently installed at low points within each tunnel to collect and dispose of this water. The floors of some tunnels are sloped by design to channel water in the middle of the walkway.

Floors and surfaces may be slippery when wet and entrants shall use caution while walking or working on wet surfaces.

16. Due to the varied types of work processes being performed in the UDS, task specific lighting may be necessary to augment the permanently installed lighting.

O. Asbestos Exposure Control Procedures:

1. It is the responsibility of each Jurisdiction to ensure work practices do not unnecessarily disturb asbestos or protective covers. When a tunnel entrant has reason to believe asbestos may be disturbed from planned work in the CPP Tunnel/Vault System, advance notification shall be forwarded to the CPP TSS. The CPP TSS will issue authorization for entry. Work that has the potential to disturb asbestos or presumed asbestos containing materials shall comply with all applicable asbestos regulations.

2. It is the responsibility of each PRCS Supervisor to ensure that applicable personal monitoring is performed as required to document potential exposure to asbestos containing materials (ACM) and presumed asbestos containing materials (PACM). All results will be submitted to the CPP TSS.

3. All entrants shall be briefed on and comply with access and egress/decontamination procedures, including wearing of proper PPE. Each entrant shall sign a statement agreeing to follow these procedures.

    a. Exit Decon Procedure Forms shall be distributed at the daily briefing.
    b. Entry Supervisors shall brief all Entrants on proper decon procedures and entrants shall sign the Exit Decon Procedure Form prior to entry.

4. CPP UDS tunnels and vaults may be classified as asbestos regulated areas. AOC & OSHA compliant decontamination procedures are mandatory for personnel prior to exiting any active abatement area containing ACM/PACM. Contractors shall develop and implement OSHA compliant decontamination procedures.

5. The following general requirements are established for AOC employees:

    a. Smoking, eating and drinking are not allowed in the CPP UDS system.
    b. Employees must wash their hands and face prior to eating, drinking or smoking following leaving the UDS.
    c. Employees must decontaminate in accordance with paragraph 8 or 9 below prior to leaving tunnel exit areas. The level of decontamination required depends on the level of work performed as discussed in paragraphs 6 and 7 below.
    d. Shower facilities are located in the trailer located behind the CPP Blue building and on the second floor of the CPP Administration Building.
    e. All personnel performing work in affected ACM/PACM spaces shall shower at the completion of the last egress of the day.

6. If Class I abatement greater than 25 linear feet or ten square feet as defined in 29 CFR 1926.1101 is to be performed, a three stage decontamination process is required.

7. For work not meeting requirements in 6 above, whenever practical, AOC employees[2] will use the two stage decontamination areas setup inside RD-1, RD-8, RD-16, RD-19 exit points, and the two stage decontamination procedures of paragraph 8. When use of pre-established decontamination areas is not practical, AOC employees shall follow the procedures of paragraph 9.

8. Two stage decontamination consists of a) the "first stage" or "dirty area" where employees move out of the UDS area, decontaminate, and remove and bag personal protective equipment except respirators, and b) the "second stage" where employees will bag 6 mil. poly. drop cloth floor covering and remove respirators. Procedures:

   a. Select the appropriate exit point and ensure required equipment and supplies are available.
      1) First stage or dirty area:
         a) At a minimum, ensure duct tape, 6 mil. poly. drop cloth, an impermeable plastic bag and a HEPA vacuum are provided. The 6 mil. poly. drop cloth shall be large enough to prevent potential contamination from spreading to other areas.
         b) Tape the plastic 6 mil. poly. drop cloth down inside the first stage.
         c) Place an impermeable plastic bag at the exit of the first stage area before the entrance to the second stage area.
      2) Second stage area:
         a) At a minimum, ensure duct tape and an impermeable plastic bag are provided.
   b. Prior to exiting UDS areas for breaks and/or the end of shift, tunnel entrants shall enter the designated containment area prior to removing personal protective equipment. The following are mandatory decontamination procedures to be followed inside the two stage containment areas:
      1) First stage:
         Personnel will enter the first stage area and vacuum off the coveralls. Each worker shall vacuum off the suit with the HEPA vacuum provided while standing on the 6 mil. poly. drop cloth. To ensure complete vacuuming workers shall vacuum the back of each other prior to removing the suit.
            a). Just prior to exiting the first stage area, remove the coveralls and gloves and place in the impermeable plastic bag provided at the exit. At this point personnel are still wearing their respirators.
      2) Second Stage Area:
         I. After entering the second stage area, gently fold up the first stage area

[2] Non-AOC legislative branch agencies may follow these procedures. By allowing others to use these procedures, AOC does not assume responsibility for others compliance with OSHA and CAA standards. That compliance responsibility remains with the Legislative Branch Agency.

6 mil. poly. drop cloth and place in the impermeable plastic bag on top of the disposed personal protective equipment.

ii. Remove respirator. Either tape up the respirator cartridge to prevent contamination or properly dispose of the cartridges by placing them in the impermeable plastic bag.

iii. Properly secure the impermeable plastic bag by twisting the bag opening and folding the opening over itself forming a "goose neck" and secure the goose neck with a minimum of 3 wraps of duct tape.

iv. Properly label the bag with labels provided by CPP which contain the AOC Control Number for asbestos waste.

v. Exit the second stage decontamination area.

vi. Transport and dispose of the bag of asbestos waste at the end of each shift in the CPP designated area located behind the CPP East Refrigeration plant. Each PRCS Supervisor is responsible for assuring that their asbestos waste bag is properly disposed of. In addition, each entrant is responsible for cleaning up their decontamination area following use.

vii. All entrants must shower prior the end of the work shift and may not leave the workplace wearing any clothes which were worn in the tunnels. All clothes worn in the tunnels must either be disposed of or laundered prior to leaving the workplace.

c. Shower facilities are located in the trailer located outside the CPP Blue building and on the second floor of the CPP Administration Building.

9. Alternate exit decontamination procedures. If other exits from tunnels or vaults are planned to be used by AOC personnel then the following decontamination procedures shall be followed:

a. Prior to starting work in the CPP tunnels or vaults a point of exit point must be identified for employees to exit for breaks and ending the work shift.

b. Decontamination equipment must be set up at designated tunnel points of exit prior to starting work.

c. Decontamination equipment will consist of duct tape, 6 mil. poly. drop cloth, impermeable bag, and a HEPA vacuum.

d. Tape the 6 mil. poly. drop cloth down just inside the designated point of exit. The 6 mil. poly. drop cloth shall be large enough to prevent potential contamination from spreading to other areas.

e. When the workers leave the tunnel to take breaks or to end the shift the following mandatory procedures will be followed:

1) Each worker must vacuum off the disposable coveralls with the HEPA vacuum while standing on the 6 mil. poly. drop cloth. To ensure complete vacuuming, workers shall vacuum the back of each other prior to removing the disposable coveralls.

2) Remove disposable personal protective equipment except respirator and

gently lay them on the 6 mil. poly. drop cloth. Personal protective equipment examples include disposable coveralls, disposable gloves, etc.

3) Gently fold the 6 mil. poly. drop cloth over the disposable personal protective equipment and place in an impermeable plastic bag.
4) Remove respirator. Respirator cartridges must either be taped up to prevent contamination or properly disposed by laying them in the impermeable plastic bag.
5) Properly secure the impermeable plastic bag by twisting the bag opening and folding the opening over itself forming a "goose neck" and secure the goose neck with a minimum of 3 wraps of duct tape.
6) Properly label the bag with labels provided by CPP which contain the AOC Control Number.
7) Transport and dispose of the bag of asbestos waste at the end of each shift in the CPP designated area located behind the CPP East Refrigeration Plant. Each PRCS Supervisor is responsible for assuring that their asbestos waste bag is properly disposed of. In addition, each entrant is responsible for cleaning up their decontamination area following use.
8) All personnel performing work that could disturb asbestos in a ACM/PACM space must shower after the last entry of the day and may not leave the workplace wearing any personal protective clothing which were worn in the tunnels. Shower facilities are located in the trailer located outside the CPP Blue building and on the second floor of the CPP Administration Building.

Attachment A:

December 12, 2006

U.S. Capitol Power Plant
Utility Distribution System Access Authorization Request Form

Employee Name: _____

Requested Access Authorization Start Date: _____ End Date: _____

Employer (check one)
_____ AOC
_____ Non-AOC Legislative Branch
_____ Contractor

Access Authorization Level (check one):
_____ "Escort Required" Entrant
_____ "Unescorted" Entrant

Employee Information: ID #: _____
Social Security #: _____
Phone Number: _____
Fax Number: _____

ATTACH DOCUMENTATION TO SHOW THAT THE FOLLOWING REQUIREMENTS HAVE BEEN MET:

Training	Certificate		Expiration Date
	Yes	No	
Permit Required Confined Space Training			
Asbestos Awareness (or higher)			
Respiratory Protection Training			
Respirator Fit Test			
Heat Stress Prevention Training			
Respirator Medical Clearance			

Jurisdictional Review (Superintendent / COR / PM / Supervisor): The individual meets access requirements.

_____ _____ _____
Name / Title Signature Date

Forward To: Capitol Power Plant: Attn: CPP Tunnel Safety Specialist Fax (202) 225-7308

Access Authorization Level:
_____ Approved as "Escort Required"
_____ Approved as "Unescorted"
(Approval: TSS Initial Here _____)
_____ Not Approved

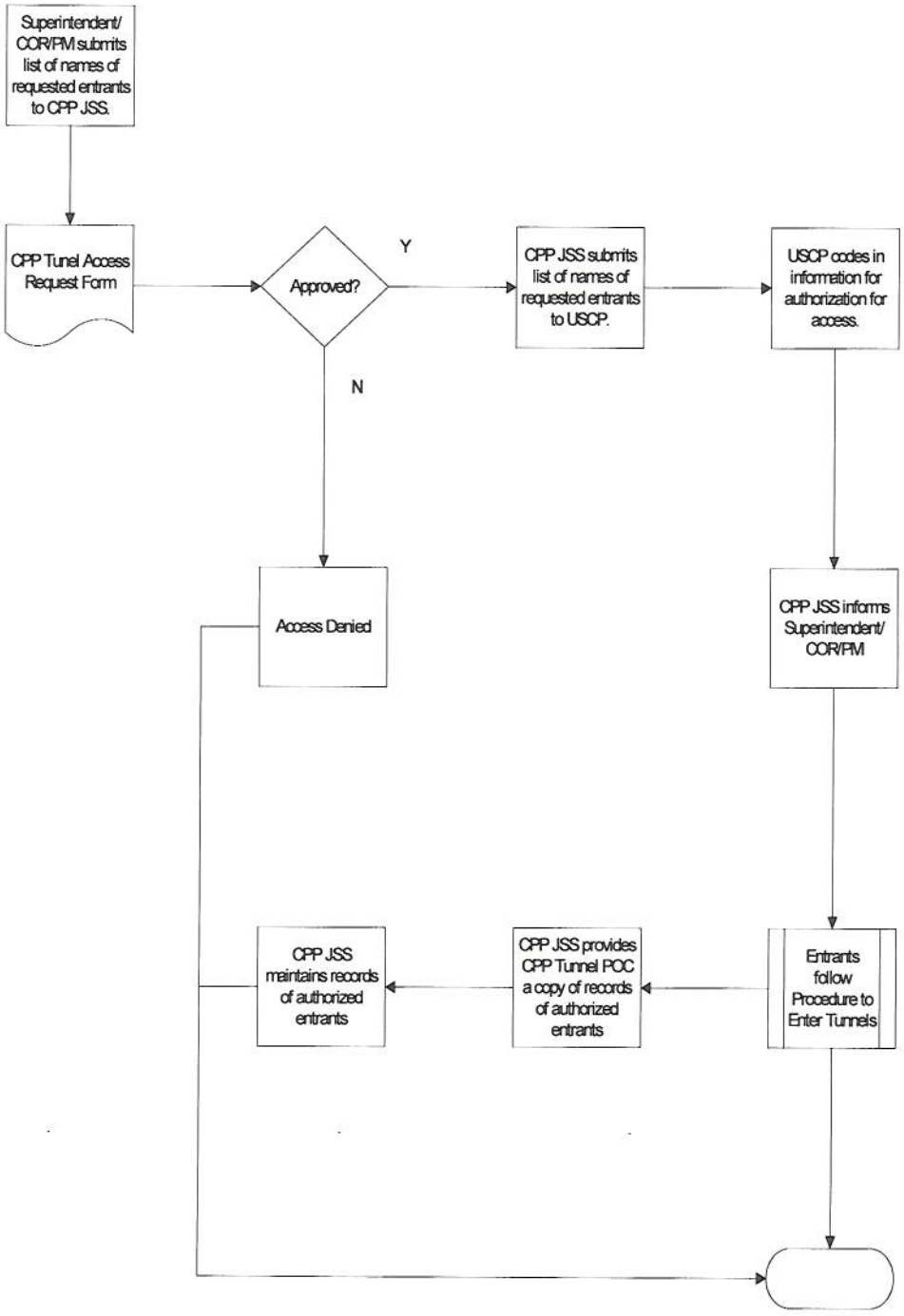
Access Expiration Date: _____

CPP Tunnel Safety Specialist Approval:

_____ _____ _____
Name Signature Date

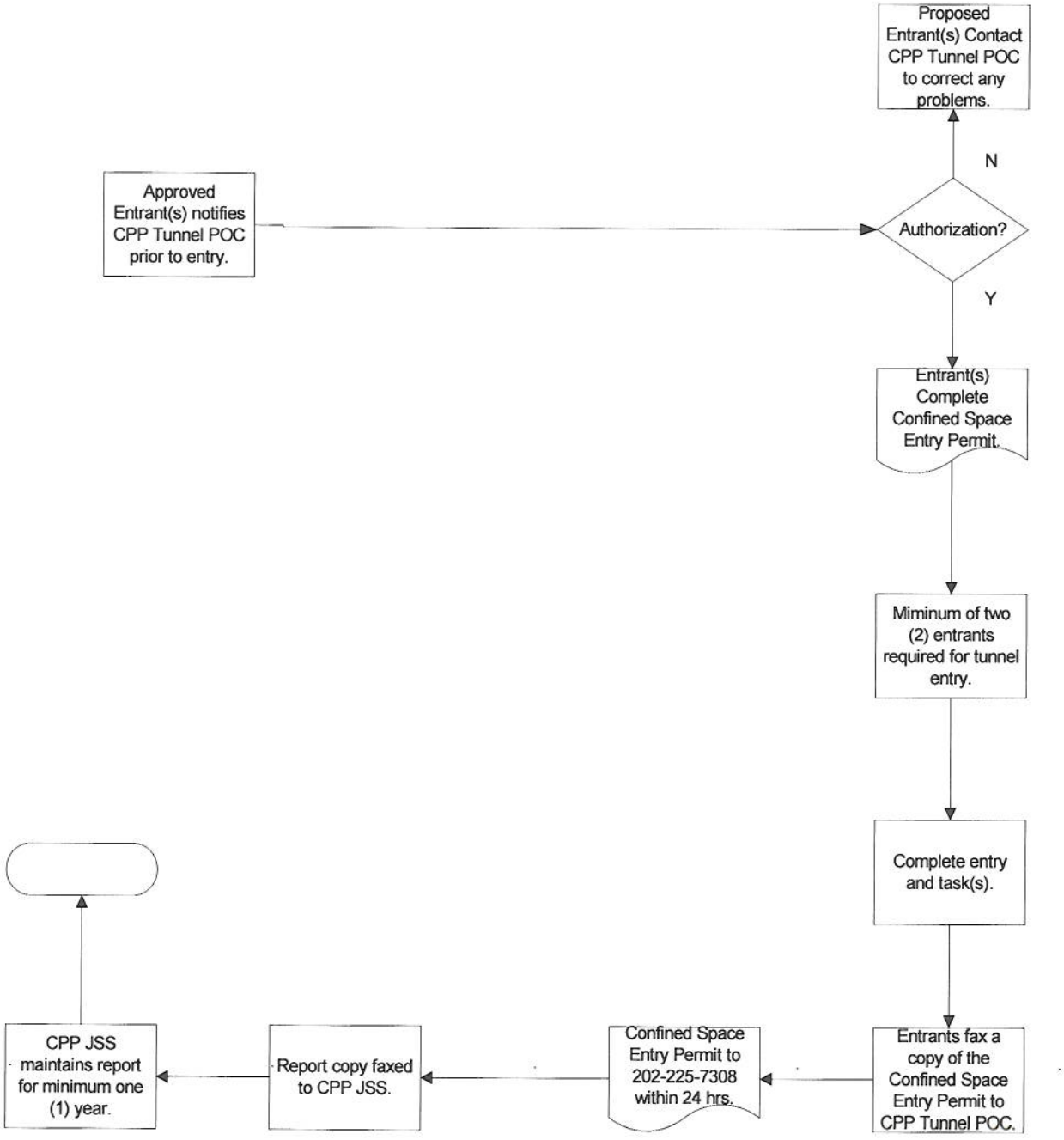
Attachment B:

Procedures to Gain Authorization for Tunnel Access



Attachment C:

Procedure to Enter Tunnels



Attachment D:

U.S. Capitol Power Plant Confined Space Entry Permit

DATE & TIME

Date & Time Issued: _____

Date & Time Expires: _____

TASK DESCRIPTION

Job site location: _____

Purpose of entry: _____

Entry Location: _____

Exit/Decon Location: _____ Emer. Evacuation Assembly Area: _____

Attendant Location (Door Designation, Cross Street, etc.): _____

Hazards associated with entry: High temperature [ ] Poor illumination & Physical obstructions [ ]
Falling Hazards (spalling concrete) [ ]

Response Actions for entry: Monitor atmosphere, ventilate area and pump out water if needed before entry

Designated rescue procedures: Call 202-224-0911 or 202-225-0911

PERSONNEL	**PRINT**	**SIGN**
Entry Supervisor:	_____	_____
Outside Attendant:	_____	_____
Authorized Entrant(s):	_____	_____
	_____	_____
	_____	_____

EQUIPMENT

Type of direct reading gas monitor: _____

Date gas monitor was calibrated: _____

Ventilation: Natural [ ] Mechanical [ ]

List of personal protective equipment: Hard Hat [ ] Gloves [ ] Flashlight [ ]
Disposable coveralls with hood/boots [ ] Respirator with Hepa Cartridge [ ]
Body Harness [ ] Safety Glasses [ ] Safety Shoes [ ]

COMMUNICATION

Communication method between attendant & entrant: Radio & Voice

Communication method between attendant & rescue: Radio & Cell Phone/Telephone

Rescue service provider phone #: Call 202-224-0911 or 202-225-0911

ATMOSPHERIC TESTING

TIME	LOCATION	COMBUSTIBLE 10% of LEL	OXYGEN 19.5-23.5%	CARBON MONOXIDE 35 ppm	HYDROGEN SULFIDE 10 ppm	TEMP	HUMD	WET BULB

Attachment E:

U. S. Capitol Power Plant
Tunnel Pre-entry Permit Required Confined Space Entry
Safety Briefing Checklist

Date:_____

Confined Space Entry Review	Status	Comments
JHA Review	☐ Completed	
Tunnel Hazards: Emergency lighting Oil soaked, cork covered piping Overhead falling hazard Electrical hazards Uneven walking surfaces Potential live steam or water line rupture Restricted emergency exits Fall hazards Rotating fan pulleys Burned by steam Hot metal surfaces Heat stress Slipping and falling Other Hazards	☐ Completed	
Pre-entry testing results	☐ Completed	
Lighting	☐ Completed	
Ventilation	☐ Completed	
Communications	☐ Completed	
Personal Protective Equipment	☐ Completed	
Emergency Evacuation	☐ Completed	
Emergency Notification	☐ Completed	
Worker Assignments	☐ Completed	

By signing this I acknowledge that I have received a safety briefing prior to entry to Confined Space . Any violations of this policy should be reported to the Deputy Director of the Capitol Power Plant, at (202) 226-3864 or Cell (202) 641-6651).

	Print:	**Sign:**
Confined Space Supervisor Signature:	_____	_____
Attendant Signature:	_____	_____
Entrant Signatures:	_____	_____
	_____	_____

Attachment F:

AOC Exit Decon Procedures

Procedures for RD-1, RD-8, RD-16, and RD-19

Workers shall enter the designated containment area prior to removing personal protective equipment. The following are mandatory decontamination procedures to be followed inside the two stage containment areas:

First Stage:

1. Personnel will enter the first stage area and vacuum off their disposable coveralls with HEPA vacuum.
2. Remove disposable coveralls, disposable gloves, and booties, etc., (Respirator remains on).

Second Stage:

1. Enter second stage area, fold up plastic and clothing and place in asbestos bag.
2. Remove Respirator and dispose of HEPA cartridge in asbestos bag, clean mask.
3. Twist neck of bag forming a goose neck and secure with tape at least 3 wraps.
4. Properly label bag.
5. Dispose of ACM waste bag at end of shift in storage container behind CPP East Refrig. Plant.
6. Exit decon (make sure decon area is clean).
7. Showers are available in CPP Decon trailer or CPP administration building.
8. All personnel must shower at the end of last entry of the day.

Alternate Exit Decon Procedures

1. Place 6 mil. poly. on the floor.
2. Vacuum off disposable coveralls, remove disposable coveralls, and gloves.
3. Fold up poly. and clothing, and place in asbestos bag.
4. Remove Respirator, place HEPA filter in asbestos bag, clean mask..
5. Twist asbestos bag into a goose neck, and secure with tape, 3 wraps at least.
6. Label bag.
7. Dispose of waste in storage area behind CPP East Refrig. Plant.
8. Showers are available in CPP Decon Trailer and CPP Administration building.
9. All personnel must shower at the end of last entry of the day.

I have been briefed in the Decon procedures for exiting the tunnels, manholes, and vaults.
If you see any entrants not complying with the above Decon procedures please notify CPP TSS at 202-329-6522 or the CPP Deputy Director of the Capitol Power Plant at (202) 226-3864 or (202) 641-6651.

Print:	**Sign:**	**Date:**

Attachment G:

United States Capitol Power Plant
UDS Escort Request Form

(Must be submitted 5 days prior to entry)

Project Name:
Project Description:
Work Location:
Requested Entrance Dates & Times:
Contractor Information (Contractor Only): **Contractor Name:** _____ **On Site Supervisor Name:** _____ **Contractor Phone No.:** _____ **On Site Supervisor Phone No.:** _____ **Contractor Fax No.:** _____
Job Hazard Analysis (AOC Only): **Submitted:** _____ **Date:** _____ **Approved:** _____ **Date:** _____
AOC Project Manager: _____ (Printed Name / Jurisdiction) _____ (Phone No.) _____ (Signature) _____ (Fax No.)
Safety Briefing: _____ (Location) _____ (Date) _____ (Time)
AOC / CPP Approvals: **Scope / Schedule:** _____ (Printed Name) _____ (Signature) _____ (Date)

January 19, 2007

The Architect of the Capitol
United States Capitol Power Plant
New Jersey Ave. E Street, S.E.
Washington, DC 20003

UDS Personal Heat Stress Monitoring

NAME	Core Temperature	First Pulse	Second Pulse	Remarks

To check the heart rate, count the radial pulse for 30 seconds at the beginning of the rest period. If the heart rate exceeds 110 beats per minute, shorten the next work period by one third and maintain the same rest period.

The recovery heart rate can be checked by comparing the pulse rate taken at 30 seconds (P1) with the pulse rate taken at 2.5 minutes (P3) after the rest break starts. The two pulse rates can be interpreted using Table 6.1.

Heart rate recovery pattern (OSHA Technical Manual Table III.4.4)

	Difference between P1 and P3	
Satisfactory recovery	<90	---
High recovery (Conditions may require further study)	90	10
No recovery (May indicate too much stress)	90	<10

If body temperature taken through ear canal exceeds 99.7F, shorten the next work cycle by one third.

ATTACHMENT H

ATTACHMENT J.6 – REPLACEMENT EQUIPMENT AND MATERIAL SPECIFICATIONS

1. **Steam and Condensate Piping:**

   ASTM A53, Type S (seamless); schedule 80 for steam supply lines up to 12’ in diameter, X-Heavy for 14” and larger. All connections to be welded unless otherwise specified.

2. **Chilled Water Piping:**

   ASTM A53, Type S (seamless); schedule 40 for chilled water supply and return lines up to 12’ in diameter, X-Heavy for 14” and larger. All connections to be welded unless otherwise specified.

3. **Pipe Guides:**

   Grinnell figure 255 pipe alignment guide. Steel shall have a galvanized finish.

4. **Pipe Rollers:**

   Grinnell figure 175 roller chair, figure 271 pipe roll stand, or figure 274 adjustable pipe roll stand. Steel shall have a galvanized finish.

5. **Pipe Saddles:**

   Grinnell figure 162 (2" insulation) or figure 165 (4" insulation) pipe covering protection saddle. Steel shall be galvanized after saddle is welded to pipe.

6. **Anchors:**

   Manufactured with expansion joint as an integral main anchor base; or (if separate from expansion joint) constructed of 3/4" pipe bands with ears, continuously welded around pipe and where ears attach to stanchions (drawings available upon request).

7. **Stanchions:**

   For structural members, ASTM A36 rectangular tube steel with a galvanized finish, ASTM A500 galvanized steel for all other steel.

8. **Expansion Joints:**

   Externally pressurized, packless, single- or double-travel expansion joints with 321 stainless steel bellows and beveled weld ends. Minimum pressure rating of 300 psi. Minimum temperature rating of 450 degrees F. Recommended to be ordered with integral carbon steel main anchor base instead of separate anchors for piping. Wall thickness shall be the same as pipe in that size. Threaded drain connection to be back-welded. Recommended models: Microflex MXS300 (single) or MXD300 (double).

9. **Valves:**

   For steam supply piping: Class 300, carbon steel, triple offset, rotary tight-shut-off valves with ANSI B16.10 double flanges. The valves shall use a 216-grade cast carbon steel valve body. The seating system is to be torque seated for zero leakage. Manual actuator and handwheel shall be provided and installed on the valves by the manufacturer. Recommended models: Adams Class 300 Series 316 Type MAK Split Body or Vanessa Class 300 Series 33,000. For

condensate piping: Class 300 carbon steel gate valves with beveled weld ends and furnished with a steel handwheel. Valves for trap assembly as noted in trap assembly drawing.

10. Steam Traps:

Traps of various makes and models are used throughout the system. The Contractor shall ensure that any replacement traps are compatible with the existing system functions.

11. Strainers:

Y-pattern strainer with 250-psi minimum steam working pressure, cast steel body, stainless steel mesh screen, tapped blow-off plug, and threaded-end connections.

12. Steam and Condensate Piping Insulation:

SSL 850-degree fiberglass insulation. Two layers of 2-inch-thick insulation for steam line, with top and bottom layers overlapping 50% of their length. One layer of 2-inch-thick insulation for pumped condensate and high-pressure trap return lines. One layer of 1-inch-thick insulation for trap stations (only the piping and elbows are to be insulated). Wrap insulation with .016-inch stucco-embossed aluminum jacketing secured with 3/4" stainless steel bands and wing clips every 18 inches.

13. Chilled Water Piping Insulation:

14. Electric:

A. Lighting Fixtures: wall-mounted, right-angle, 120-volt, vapor-tight lighting fixtures as manufactured by M. Stephens Manufacturing, Inc., part no. VXWG-21-CG. Lamps shall be 23W, spiral-tube, compact fluorescent as manufactured by Sunrise, model SSE-24. The fixtures shall be NEMA rated for wet and corrosive environments.

B. Receptacles: Locate a 20-Amp dual receptacle at each lighting fixture location. Provide combination junction box/electrical outlets that are NEMA 4X rated for wet and corrosive environments. The electrical outlets shall be mounted approximately 3 feet above the floor.

C. Panels and Circuit Breakers: 240/120-volt, 3-phase, NEMA 4x, stainless steel hinged enclosure panels. The dimensions for each panel shall be minimized to accommodate the lack of space within the tunnels. Circuit breakers shall be appropriately sized for the loads connected to them and the wire sizes used. All circuit breakers shall be rated for a minimum temperature of 194^{o}F. Provide a circuit directory contained within a sealed plastic pouch for each panel installed. The contractor shall provide a copy of the circuit directories for all of the new panels in an electronic format using Microsoft Excel.

D. Conduit, Boxes, and Wiring: All new conduit, fittings and boxes shall be shall have a minimum temperature rating of 350°F and be corrosion proof. Conduit shall be made of fiberglass and the recommended manufacturer is FRE Composites. All conduit shall be installed parallel to walls, floors, and ceilings were possible, except were pitch is required for drainage. Conduit shall be firmly attached to the tunnel walls at intervals not to exceed three feet (3'). All conduit shall be attached to the tunnel walls in such a way as to minimize intrusion into the tunnel walking space, nor shall it interfere with the operation and maintenance of the piping and associated equipment. All conduit couplings and fittings shall be "lock seal" type. Epoxy-glued type couplings and fittings

shall not be used. Provide and install expansion joint couplings every twenty feet in all conduit installed. The expansion couplings installed shall meet or exceed the conduit temperature rating and shall be corrosion proof. All boxes will be considered junction boxes and shall have hinged covers. All boxes shall be mounted level and plumb, and shall be rigidly anchored to the supporting surface. Machine bolt expansion anchors shall be used to fasten boxes to concrete surfaces. Anchor bolts shall have a minimum diameter of ¼ inch, and spacers shall be used to provide at least ¼ inch clearance between the back of the box and the mounting surface. All wire shall be THHN. All wire installed shall be sized for an ambient temperature of 194°F. The Contractor shall not exceed the maximum allowable number of conductors in any conduit run as defined in the National Electric Code.

E. Mounting Hardware: All mounting hardware, screws, conduit clamps, bolts, washers, anchors, "Kindorf", etc. shall be stainless steel and corrosion proof.

15. Motors:

Fan motors shall be totally enclosed, fan cooled (TEFC) type as manufactured by Baldor, Inc, and rated for 230/460 volt, three phase, 60 hertz operation.

16. Additional Guidelines:

All new structural steel shall be ASTM A36 galvanized tube steel. All other steel shall be ASTM A500 galvanized steel. All welds shall be made with E70xx electrodes. All non-galvanized and non-stainless steel, as well as all steel in areas that have been welded, shall be galvanized in accordance with ASTM A123. All fastener hardware shall be Type 316 stainless steel. Expansion anchors for attaching brackets and stanchions to the tunnel ceiling, walls, or floor shall be Hilti Kwik Bolt II or Powers Rawl Power-Stud heavy duty, stud or threaded version, Type 316 stainless steel expansion anchors. All expansion anchors shall be installed with Type 316 stainless steel nuts, washers, and lock washers. All hardware for flanges shall be ASTM A193 Grade B7 bolts and studs, and ASTM A194 Grade 2H hex nuts. The contractor shall follow the manufacturer's guidelines for installation of all new products. The contractor shall provide submittals for AOC approval for all products to be used in the Utility Distribution System not specified herein. All welders shall be AWS certified to work on structural supports. The contractor or any sub-contractor shall conform to ASME code for Pressure Piping, ASME B31.1, Power Piping, while performing any pipe welding in the Utility Distribution System. The contractor shall have quality control procedures in place which address Welding Procedure Specifications (WPS) and Procedure Qualification Records (PQR) for each type of repair.

ATTACHMENT J.7 – PREVENTIVE MAINTENANCE CHECKLISTS

The following checklists (also called guide cards) define the minimum level of maintenance procedures for inspecting components located in the Utility Distribution System. The Contractor shall confirm these procedures when performing preventive maintenance inspections. Revised procedures may be issued from time to time and the Contractor shall comply to revised procedures as they are provided.

Title: E-17 Expansion Joints:

Purpose:	Receives and absorbs stress placed on the steam lines.
Reference:	Vendor's Brochures
Tools:	1. Tool Group C 2. Lubricants 3. Fine Sand Cloth
Precautions:	1. Refer to and use all safety procedures. 2. Relieve stress on steam line if necessary 3. Has high pressure steam flowing through the joints
Criteria:	Inspection by General Foreman, Building Manager, and Technical Support Staff personnel.
Description:	1. Remove cover. 2. Examine joint closely, look for evidence of displacement, loose or defective anchors or bolts, alignment of joint with piping, guide rods, etc. Correct what can be done with pressure on. Repair or replace as necessary. 3. Clean barrel with fine sand cloth to remove as much rust and debris as possible. 4. Lubricate barrel. 5. Observe packing gland, adjust to stop weeping or leaks. 6. If slugs are added, remember to return the slugging ran all the way down inside the barrel after completion. 7. Renew packing completely when system is down for other reason such as repair, overhaul, or maintenance of other components. 8. Replace cover.
Additional Documents:	

Title: E-28 Motor Starters, 100 Horsepower and Up:

Purpose:	Operate a variety of mechanical pieces of equipment allowing tunnel systems to function.

Reference:	Vendor's Brochure
Tools:	1. Tool Group B 2. Test Set 3. Micro-Ohmmeter 4. Megger 5. Vacuum Cleaner
Precautions:	1. Schedule outage with operating personnel. 2. De-energize, Tag, and lockout circuit. All tests shall conform to the appropriate ASTM test procedures and the values used as standards shall conform to the manufacturers and ANSI standards specifications. 3. Refer to and use all safety procedures.
Criteria:	Inspections by General Foreman, Building Manager, and Technical Support Staff personnel.
Description:	1. Visually Inspect for broken parts, contact arcing, or any evidence of overheating. 2. Check motor nameplate for current rating and controller manufacturer's recommended heater size. 3. Check line, load connections, and heater mounting screws for tightness. Tighten as necessary. 4. Perform time/current characteristics test at the appropriate multiple of heater rating. 5. Record test results both as found and as left. 6. Check contact resistance in micro-ohms and dielectric strength in meg-ohms. 7. Check starter connections by applying a thin film of black contact grease to the line and load stabs then rack the breaker in and out of the cubicle and measure the wipe marks on the stab. Clean contacts. 8. Remove tags and lock, return circuit to service.
Additional Documents:	

Title: F-27 Fans, Centrifugal:

Purpose:	Provides transfer of air throughout the utility tunnels and utility plants.
Reference:	Vendor's Brochure
Tools:	1. Tool Group Basic 2. Tachometer 3. Vacuum 4. Respirator
Precautions:	1. Review manufacturer's instructions. 2. Schedule shutdowns with operating personnel, as needed. 3. Open, lock, and tag electrical circuits.

Criteria: Inspection by General Foreman, Building Manager, and Technical Support Staff personnel.

Description:
1. Check fan blades and fan housing for dust buildup and clean.
2. Check fan blades and moving parts for excessive wear. Clean.
3. Check fan RPM to design specifications.
4. Check bearing collar set screws on fan shaft to make sure they are tight.
5. Vacuum interior of unit if accessible. Clean exterior.
6. Lubricate fan shaft bearings while unit is running. Add grease slowly until slight bleeding is noted from the seals. Do not over lubricate. Remove old or excess lubricant.
7. Check belts for wear, adjust tension or alignment, and replace belts when necessary. Multiple belt drives should be replaced with matched sets.
8. Check structural members, vibration eliminators and flexible connections.
9. Schedule PM on motor at same time.

Title: F-36 Fans, Propeller 24" Diameter or Larger:

Purpose: Moves heated/cooled air throughout the tunnels.

Reference: Vendor's Brochure

Tools:
1. Tool Group Basic
2. Vacuum

Precautions:
1. Disconnect and tag electrical circuit or switch.
2. Refer to and use all safety precautions.
3. Schedule outage with operating personnel
4. Perform in conjunction with MOTOR PM.

Criteria: Inspection by General Foreman, Building Manager, and Technical Support Staff personnel.

Description:
1. Operate unit, check for excessive vibration or noise.
2. Clean unit, especially fan blades.
3. Inspect pulleys, belts, couplings, etc. Adjust tension and tighten mountings as necessary. Change badly worn belts. Multi-belt drives should be replaced with matched belt sets.
4. Lubricate fan sleeve bearings, fan thrust bearing, and motor as necessary.
5. Clean motor with vacuum or low pressure air. Check for obstructions in motor cooling and air flow.

Title: M-3 Motors:

Purpose: This guide is for squirrel-cage, wound-rotor and synchronous motors in excess of 1 horsepower. The maintenance specified by this guide is not intended to require disassembly of the motor. This guide does not normally apply to motors rated less than 1 horsepower. Maintenance for these motors is normally limited to cleaning and lubrication which is accomplished with the maintenance of the driven machine.

Reference: Vendor's brochures

Tools:
1. Tool Group B
2. Multi Meter
3. Tachometer
4. Lubricant

Precautions:
1. If necessary, schedule shutdown with operating personnel.
2. Review manufacturer's instructions.
3. Open, tag, and lock circuit serving motor, when applicable.

Criteria: Inspection by General Foreman, Building Manager, and Technical Support Staff.

Description:
1. Check ventilation ports for soil accumulation, clean if necessary.
2. Clean exterior of motor surfaces of soil accumulation.
3. Lubricate bearings:
    a. Remove filler and drain plugs (use zerk fittings if installed).
    b. Free drain hole of any hard grease (use piece of wire if necessary).
    c. Add grease - use good grade lithium base grease unless otherwise noted.
4. Check motor windings for accumulation of soil. Blow out with air if required.
5. Check hold-down bolts and grounding straps for tightness.
6. Remove tags and return to service.
7. Perform maintenance of circuit breakers, disconnects, and start/stop stations associated with this motor.
8. Operate motor, check for excessive noise or vibration.
9. Fill Preventative Maintenance records properly.

Additional Documents:

Title: M-4 Manholes:

Purpose: Protect tunnels and allow access to equipment.

Reference: Vendor's Brochures

Tools:
1. Tool Group Basic
2. Barricades
3. Portable Ventilators

4. Gas/ Oxygen testers

Precautions:
1. Have personnel outside of manhole as a safety precautions in case of a emergency is required. Follow AOC and OSHA confined space requirements.
2. Wear appropriate protective clothing.
3. No open flames or smoking near the inside of manhole.
4. Place barricades around manhole.
5. Provide ventilation within the manhole.

Criteria:
Inspection by General Foreman, Building Manager, and Technical Support Staff personnel.

Description:
1. Test for gas.
2. Remove cover.
3. Pump out water.
4. Clean out trash, debris, etc. and dispose of properly
5. Inspect structural fixtures, interior of manhole, manhole frame, and cover for corrosion, deterioration, or other defects.

Additional Documents:

Title: S-7 Sump Pumps:

Purpose:
Removes surface water from tunnels and manholes.

Precautions:
1. Strainer cleaning requires removal of pump unit and should be handled as a repair.
2. Perform in conjunction with PM of all associated valves.

Criteria:
Inspection by General Foreman, Building Manager, and Technical Support Staff personnel.

Description:
1. With pit pumped down and both pumps off, raise float rod (until one pump runs) and observe which pump turns on.
2. Check bail, floats, rods, and switches. (Make sure float operates as designed.)
3. Inspect and lube motor, and pump (repack if needed).
4. Inspect check valves.
5. Clean out debris from areas above and below grate in the sump pit.
6. Clean out discharge lines from the sump pit to the storm drain or sewer.

Tools & Materials:
1. Tool group C
2. Cleaning equipment and materials
3. Lubricants

Title: T-8 Traps, (All Types):

Purpose: These traps are very important to the heating system because they remove condensation from the steam system to help prevent water hammer.

Reference: Vendor's Brochures

Tools: 1. Tools Group C
2. Gaskets

Precautions: 1. This item is under high pressure (up to 200 PSI); use extreme caution when performing PM on this item.
2. Refer to and follow all safety procedures.

Criteria: Inspection by General Foreman, Building Manager, and Technical Support Staff personnel.

Description: 1. Thermostatic traps (bellows or diaphragm type):

a. Remove cap or bonnet.
b. Clean interior of trap, valve, and seat
c. Inspect bellows or diaphragm and note by sound where it contains liquid charge.
d. Replace bellows or diaphragm as necessary.
e. If valve seat is cut, replace seat.

2. Float and/or thermostatic traps:

a. Remove bonnet.
b. Inspect linkage and float operation for leakage, defective operation, or deterioration.
c. Examine, clean, and check operation of bellows as in 1 above.

3. Inverted bucket trap:

a. Remove bonnet.
b. Clean interior of trap.
c. Inspect valve linkage mechanism and seating of valve.
d. Examine condition of bucket.
e. Examine vent or face, inlet, and outlet for evidence of corrosion.

4. Impulse traps:

a. Remove bonnet.
b. Inspect valve disc, inlet valve, and outlet face.
c. See that fulcrum point is free of dirt.
d. Clean body of trap.

5. Associated Equipment:

a. Valves: high side valve, low side valve, test valve, and strainer valve

i. Open and close valves, checking for operation of valve. If valve does not properly isolate, is clogged up,

or can not be turned by hand, write work order to replace.

ii. Check packing gland. If gland is all the way down or hissing due to leakage, and adjusting packing nuts will stop the problem, repack the valves.

iii. Check valve operation, close high side valve, open test valve. If steam continues to come out of test valve then the check valve is not holding. Write work order at this time for repair or replacement.

6. Traps with test valves:
   a. Close off low side valve, open test valve. Check the cycling of the trap, if trap continues to blow without cycling on and off, the trap is possibly blowing through or weep hole is clogged. Try unstopping weep hole, or at this time write work order for repair or replacement. Make note under comment section on PM sheet as per this trap system. After completion of PM of trap system, return system to service.

7. Test valves:
   a. This is the test valve for trap systems.
   b. Note lack of test valve (if missing) and write work order for installation of test valve.

8. Operation:

   a. Ensure proper and efficient operation of trap and associated equipment upon completion of PM. PM is not complete until trap station is working properly or the defective equipment has been scheduled for repair or replacement.

Additional Documents:

Title: V-2 Valves, Safety:

Purpose: This procedure applies to safety valves installed on boilers, steam lines, and other equipment. The safety valves are designed to relieve excessive pressure thus preventing rupture or explosion of the pressure parts. Safety valves differ from relief valves in that the safety valves start to open when pressure overcomes the spring pressure and remains open to the degree the pressure pushes it open, when the pressure drops the spring closes the valve.

Reference: Vendor's Brochures

Tools:
1. Tool Group Basic
2. Lubricant Graphite
3. Appropriate Packing

Precautions: 1. Check with foreman and operating personnel before performing test.

2. Refer to and use all safety procedures.

Criteria: Inspection by General Foreman, Building Manager, and Technical Support Staff personnel.

Description:
1. Inspect condition of spring, flanges, and threaded connections.
2. Inspect and hand lift the manual lifting lever, checking for binding of the stem or seat. Note that valve returns to proper position when the lever is released.
3. Inspect support brackets and tighten as necessary.
4. Check that the discharge piping support is tight and not causing stress on the valve.
5. Clean the valve body.
6. Lubricate the stem and lever pivot points.

Additional Documents:

Title: V-5 Valves, Manual:

Purpose: To insure that the valves are in operational order and can be used when required within the flow train.

Reference: Vendor's Brochures

Tools:
1. Tool Group C
2. Appropriate packing
3. Lubricant, anti-seize

Precautions: Make sure there is no water/steam/gas pressure on the line before servicing. On large valves, insure that proper tools are used to open/close the valves.

Inspection Criteria: Inspection to be done by General Foreman, Building Manager, and Technical Support Staff.

Description:
1. Operate the valve in full open/closed position. Inspect seals and discs for wear and contaminant buildup when valve will not close tightly. Replace seals and discs as necessary.
2. Check for sticking valve stems. Lubricate stems and fittings sparingly.
3. Replace packing; dress re-brush, or replace packing gland. Assemble as necessary.
4. Check for freedom of motion of valves equipped with wheel and chain for remote operation. Lubricate as necessary.

Additional
Documents:

Title: V-6 Valves, Motor Operated:

Purpose:	Allows fluid or air flow through system process.
Reference:	Vendor's Brochure
Tools:	Tool Group Basic
Precautions:	1. Schedule outage with operating personnel. 2. Perform PM in conjunction with Motor, Circuit Breaker, and Disconnect.
Criteria:	Inspection by General Foreman, Building Manager, and Technical Support Staff personnel.
Description:	1. Clean unit and make visual examination of all parts. 2. Operate from limit-to-limit. Observe operation, look for binding, sluggishness, action of limits, etc. 3. Determine if valve seats and holds properly. 4. Check condition of packing. 5. Check condition of dials and positioners. 6. Apply graphite to moving parts of valve. 7. Lubricate motor and gear box as necessary. 8. Inspect contacts, brushes, motor, controls, switches, etc. Clean and adjust as necessary.
Additional Documents:	PM Guide cards for Motor, Circuit Breaker, and Disconnect.

Title: V-7 Valves, Pneumatic:

Purpose:	Allows flow through lines and system.
Reference:	Vendor's Brochure
Tools:	1. Tool Group C 2. Graphite Lubricant
Precautions:	1. Schedule outage with operating personnel. 2. Secure and tag any electric, pneumatic, or hydraulic lines or circuits serving valve before servicing of motor, gearbox, or piston. 3. Refer to and use all safety precautions.
Criteria:	Inspection by General Foreman, Building Manager, and Technical Support Staff personnel.

Description:	1. Clean unit and make visual examination of all parts. 2. Operate from limit to limit. Observe operation, looking for binding, sluggishness, action of limits, etc. 3. Determine if valve seats hold properly, correct if necessary. 4. Apply graphite to moving parts of valve. 5. Clean solenoids 6. Inspect cylinder, piston, washers or 'o' rings, controls and switches. Clean and adjust as necessary. 7. Check for leaks. Reseal if necessary. 8. Perform maintenance on circuit breakers, disconnects, and start/stop stations associated with this valve.
Additional Documents:	

Title: V-8 Valves, Critical Check:

Purpose:	To prevent back-flow situations with the water/steam/gas flow train.
Reference:	Vendor's Brochures
Tools:	1. Tool Group C 2. Appropriate Gaskets/Packing 3. Lubricants
Precautions:	1. Do not service unless line has no water/steam/gas pressure within the line. 2. Schedule outage with operating personnel.
Criteria:	Inspection by General Foreman, Building Manager, and Technical Support Staff personnel.
Description:	1. Isolate check valve. 2. Insure all pressure removed from serviced line. 3. Remove cover and clean valve seat and disc. 4. Inspect valve seat and disk for cracks or scars. 5. Where applicable, inspect hangers or piping mountings. 6. Inspect packing and gaskets for deterioration and replace as necessary. 7. Where applicable, replace insulation, clean outside, or repaint exterior of check valve. 8. Check valve during operation for leaks.

WD 05-2103 (Rev.-4) was first posted on www.wdol.gov on 07/10/2007
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REGISTER OF WAGE DETERMINATIONS UNDER THE SERVICE CONTRACT ACT By direction of the Secretary of Labor	U.S. DEPARTMENT OF LABOR EMPLOYMENT STANDARDS ADMINISTRATION WAGE AND HOUR DIVISION WASHINGTON D.C. 20210
William W.Gross Director Division of Wage Determinations	Wage Determination No.: 2005-2103 Revision No.: 4 Date Of Revision: 07/05/2007

States: District of Columbia, Maryland, Virginia

Area: District of Columbia Statewide
Maryland Counties of Calvert, Charles, Frederick, Montgomery, Prince George's, St Mary's
Virginia Counties of Alexandria, Arlington, Fairfax, Falls Church, Fauquier, King George, Loudoun, Prince William, Stafford

Fringe Benefits Required Follow the Occupational Listing

OCCUPATION CODE - TITLE	MINIMUM WAGE RATE
01000 - Administrative Support And Clerical Occupations	
01011 - Accounting Clerk I	13.79
01012 - Accounting Clerk II	15.49
01013 - Accounting Clerk III	18.43
01020 - Administrative Assistant	23.59
01040 - Court Reporter	18.43
01051 - Data Entry Operator I	12.67
01052 - Data Entry Operator II	13.82
01060 - Dispatcher, Motor Vehicle	16.50
01070 - Document Preparation Clerk	13.29
01090 - Duplicating Machine Operator	13.29
01111 - General Clerk I	13.72
01112 - General Clerk II	15.32
01113 - General Clerk III	18.74
01120 - Housing Referral Assistant	21.66
01141 - Messenger Courier	10.23
01191 - Order Clerk I	14.74
01192 - Order Clerk II	16.29
01261 - Personnel Assistant (Employment) I	15.60
01262 - Personnel Assistant (Employment) II	18.43
01263 - Personnel Assistant (Employment) III	21.66
01270 - Production Control Clerk	21.29
01280 - Receptionist	12.72
01290 - Rental Clerk	15.60
01300 - Scheduler, Maintenance	15.60
01311 - Secretary I	17.03
01312 - Secretary II	18.39
01313 - Secretary III	21.66
01320 - Service Order Dispatcher	15.82
01410 - Supply Technician	23.59
01420 - Survey Worker	18.43
01531 - Travel Clerk I	12.07
01532 - Travel Clerk II	13.01

01533 - Travel Clerk III	13.99
01611 - Word Processor I	13.76
01612 - Word Processor II	15.60
01613 - Word Processor III	18.43
05000 - Automotive Service Occupations	
05005 - Automobile Body Repairer, Fiberglass	25.26
05010 - Automotive Electrician	21.37
05040 - Automotive Glass Installer	20.14
05070 - Automotive Worker	20.14
05110 - Mobile Equipment Servicer	17.31
05130 - Motor Equipment Metal Mechanic	22.53
05160 - Motor Equipment Metal Worker	20.14
05190 - Motor Vehicle Mechanic	22.53
05220 - Motor Vehicle Mechanic Helper	16.81
05250 - Motor Vehicle Upholstery Worker	19.66
05280 - Motor Vehicle Wrecker	20.14
05310 - Painter, Automotive	21.37
05340 - Radiator Repair Specialist	20.14
05370 - Tire Repairer	14.43
05400 - Transmission Repair Specialist	22.53
07000 - Food Preparation And Service Occupations	
07010 - Baker	13.18
07041 - Cook I	11.97
07042 - Cook II	13.28
07070 - Dishwasher	9.76
07130 - Food Service Worker	10.25
07210 - Meat Cutter	16.07
07260 - Waiter/Waitress	8.59
09000 - Furniture Maintenance And Repair Occupations	
09010 - Electrostatic Spray Painter	18.05
09040 - Furniture Handler	12.78
09080 - Furniture Refinisher	18.39
09090 - Furniture Refinisher Helper	14.11
09110 - Furniture Repairer, Minor	16.31
09130 - Upholsterer	18.05
11000 - General Services And Support Occupations	
11030 - Cleaner, Vehicles	9.67
11060 - Elevator Operator	9.79
11090 - Gardener	15.70
11122 - Housekeeping Aide	10.89
11150 - Janitor	10.89
11210 - Laborer, Grounds Maintenance	12.07
11240 - Maid or Houseman	10.84
11260 - Pruner	11.37
11270 - Tractor Operator	14.19
11330 - Trail Maintenance Worker	12.07
11360 - Window Cleaner	11.31
12000 - Health Occupations	
12010 - Ambulance Driver	16.06
12011 - Breath Alcohol Technician	17.67
12012 - Certified Occupational Therapist Assistant	20.31
12015 - Certified Physical Therapist Assistant	19.99
12020 - Dental Assistant	16.90
12025 - Dental Hygienist	40.68
12030 - EKG Technician	24.34
12035 - Electroneurodiagnostic Technologist	24.34
12040 - Emergency Medical Technician	17.67
12071 - Licensed Practical Nurse I	18.60
12072 - Licensed Practical Nurse II	20.82
12073 - Licensed Practical Nurse III	21.79

12100 - Medical Assistant	14.23
12130 - Medical Laboratory Technician	18.04
12160 - Medical Record Clerk	14.96
12190 - Medical Record Technician	16.67
12195 - Medical Transcriptionist	16.46
12210 - Nuclear Medicine Technologist	28.93
12221 - Nursing Assistant I	9.75
12222 - Nursing Assistant II	10.96
12223 - Nursing Assistant III	12.99
12224 - Nursing Assistant IV	14.58
12235 - Optical Dispenser	16.67
12236 - Optical Technician	14.41
12250 - Pharmacy Technician	15.75
12280 - Phlebotomist	14.58
12305 - Radiologic Technologist	27.61
12311 - Registered Nurse I	24.92
12312 - Registered Nurse II	31.22
12313 - Registered Nurse II, Specialist	31.22
12314 - Registered Nurse III	37.77
12315 - Registered Nurse III, Anesthetist	37.77
12316 - Registered Nurse IV	45.28
12317 - Scheduler (Drug and Alcohol Testing)	18.04
13000 - Information And Arts Occupations	
13011 - Exhibits Specialist I	18.55
13012 - Exhibits Specialist II	23.33
13013 - Exhibits Specialist III	28.11
13041 - Illustrator I	18.73
13042 - Illustrator II	23.42
13043 - Illustrator III	28.82
13047 - Librarian	25.45
13050 - Library Aide/Clerk	12.52
13054 - Library Information Technology Systems Administrator	22.99
13058 - Library Technician	17.88
13061 - Media Specialist I	16.58
13062 - Media Specialist II	18.55
13063 - Media Specialist III	20.68
13071 - Photographer I	14.67
13072 - Photographer II	17.18
13073 - Photographer III	21.52
13074 - Photographer IV	26.05
13075 - Photographer V	29.15
13110 - Video Teleconference Technician	16.58
14000 - Information Technology Occupations	
14041 - Computer Operator I	16.72
14042 - Computer Operator II	18.71
14043 - Computer Operator III	20.86
14044 - Computer Operator IV	23.18
14045 - Computer Operator V	25.66
14071 - Computer Programmer I (1)	21.60
14072 - Computer Programmer II (1)	26.37
14073 - Computer Programmer III (1)	27.62
14074 - Computer Programmer IV (1)	27.62
14101 - Computer Systems Analyst I (1)	27.62
14102 - Computer Systems Analyst II (1)	27.62
14103 - Computer Systems Analyst III (1)	27.62
14150 - Peripheral Equipment Operator	16.72
14160 - Personal Computer Support Technician	23.18
15000 - Instructional Occupations	
15010 - Aircrew Training Devices Instructor (Non-Rated)	34.39
15020 - Aircrew Training Devices Instructor (Rated)	42.72

15030 - Air Crew Training Devices Instructor (Pilot)	50.66
15050 - Computer Based Training Specialist / Instructor	31.26
15060 - Educational Technologist	29.09
15070 - Flight Instructor (Pilot)	50.66
15080 - Graphic Artist	24.95
15090 - Technical Instructor	23.87
15095 - Technical Instructor/Course Developer	29.19
15110 - Test Proctor	19.04
15120 - Tutor	19.04
16000 - Laundry, Dry-Cleaning, Pressing And Related Occupations	
16010 - Assembler	8.95
16030 - Counter Attendant	8.95
16040 - Dry Cleaner	12.21
16070 - Finisher, Flatwork, Machine	8.95
16090 - Presser, Hand	8.95
16110 - Presser, Machine, Drycleaning	8.95
16130 - Presser, Machine, Shirts	8.95
16160 - Presser, Machine, Wearing Apparel, Laundry	8.95
16190 - Sewing Machine Operator	12.30
16220 - Tailor	13.01
16250 - Washer, Machine	9.81
19000 - Machine Tool Operation And Repair Occupations	
19010 - Machine-Tool Operator (Tool Room)	18.95
19040 - Tool And Die Maker	23.05
21000 - Materials Handling And Packing Occupations	
21020 - Forklift Operator	17.26
21030 - Material Coordinator	21.29
21040 - Material Expediter	21.29
21050 - Material Handling Laborer	12.65
21071 - Order Filler	13.21
21080 - Production Line Worker (Food Processing)	17.28
21110 - Shipping Packer	14.46
21130 - Shipping/Receiving Clerk	14.46
21140 - Store Worker I	10.44
21150 - Stock Clerk	14.35
21210 - Tools And Parts Attendant	17.26
21410 - Warehouse Specialist	17.26
23000 - Mechanics And Maintenance And Repair Occupations	
23010 - Aerospace Structural Welder	25.68
23021 - Aircraft Mechanic I	24.46
23022 - Aircraft Mechanic II	25.68
23023 - Aircraft Mechanic III	26.97
23040 - Aircraft Mechanic Helper	16.61
23050 - Aircraft, Painter	23.42
23060 - Aircraft Servicer	18.71
23080 - Aircraft Worker	19.90
23110 - Appliance Mechanic	20.60
23120 - Bicycle Repairer	14.43
23125 - Cable Splicer	24.98
23130 - Carpenter, Maintenance	20.36
23140 - Carpet Layer	18.70
23160 - Electrician, Maintenance	25.37
23181 - Electronics Technician Maintenance I	22.08
23182 - Electronics Technician Maintenance II	23.44
23183 - Electronics Technician Maintenance III	24.70
23260 - Fabric Worker	17.90
23290 - Fire Alarm System Mechanic	21.46
23310 - Fire Extinguisher Repairer	16.50
23311 - Fuel Distribution System Mechanic	22.81
23312 - Fuel Distribution System Operator	19.38

23370 - General Maintenance Worker 20.91
23380 - Ground Support Equipment Mechanic 24.46
23381 - Ground Support Equipment Servicer 18.71
23382 - Ground Support Equipment Worker 19.90
23391 - Gunsmith I 16.50
23392 - Gunsmith II 19.18
23393 - Gunsmith III 21.46
23410 - Heating, Ventilation And Air-Conditioning Mechanic 21.96
23411 - Heating, Ventilation And Air Contditioning Mechanic (Research Facility) 23.13
23430 - Heavy Equipment Mechanic 21.46
23440 - Heavy Equipment Operator 21.46
23460 - Instrument Mechanic 21.46
23465 - Laboratory/Shelter Mechanic 20.36
23470 - Laborer 14.27
23510 - Locksmith 19.76
23530 - Machinery Maintenance Mechanic 21.77
23550 - Machinist, Maintenance 21.52
23580 - Maintenance Trades Helper 15.10
23591 - Metrology Technician I 21.46
23592 - Metrology Technician II 22.61
23593 - Metrology Technician III 23.72
23640 - Millwright 23.30
23710 - Office Appliance Repairer 21.00
23760 - Painter, Maintenance 20.36
23790 - Pipefitter, Maintenance 22.76
23810 - Plumber, Maintenance 20.99
23820 - Pneudraulic Systems Mechanic 21.46
23850 - Rigger 21.46
23870 - Scale Mechanic 19.18
23890 - Sheet-Metal Worker, Maintenance 21.46
23910 - Small Engine Mechanic 20.05
23931 - Telecommunications Mechanic I 25.22
23932 - Telecommunications Mechanic II 26.58
23950 - Telephone Lineman 24.43
23960 - Welder, Combination, Maintenance 21.46
23965 - Well Driller 21.46
23970 - Woodcraft Worker 21.46
23980 - Woodworker 16.50
24000 - Personal Needs Occupations
24570 - Child Care Attendant 11.58
24580 - Child Care Center Clerk 16.15
24610 - Chore Aide 9.58
24620 - Family Readiness And Support Services Coordinator 12.95
24630 - Homemaker 16.75
25000 - Plant And System Operations Occupations
25010 - Boiler Tender 24.98
25040 - Sewage Plant Operator 20.23
25070 - Stationary Engineer 24.98
25190 - Ventilation Equipment Tender 17.56
25210 - Water Treatment Plant Operator 20.23
27000 - Protective Service Occupations
27004 - Alarm Monitor 17.66
27007 - Baggage Inspector 11.51
27008 - Corrections Officer 19.83
27010 - Court Security Officer 23.26
27030 - Detection Dog Handler 17.66
27040 - Detention Officer 19.83
27070 - Firefighter 22.39
27101 - Guard I 11.51

27102 - Guard II		17.66
27131 - Police Officer I		23.94
27132 - Police Officer II		26.60
28000 - Recreation Occupations		
28041 - Carnival Equipment Operator		12.35
28042 - Carnival Equipment Repairer		13.30
28043 - Carnival Equpment Worker		8.40
28210 - Gate Attendant/Gate Tender		13.01
28310 - Lifeguard		11.59
28350 - Park Attendant (Aide)		14.56
28510 - Recreation Aide/Health Facility Attendant		10.62
28515 - Recreation Specialist		18.04
28630 - Sports Official		11.59
28690 - Swimming Pool Operator		16.85
29000 - Stevedoring/Longshoremen Occupational Services		
29010 - Blocker And Bracer		20.55
29020 - Hatch Tender		20.55
29030 - Line Handler		20.55
29041 - Stevedore I		19.18
29042 - Stevedore II		21.64
30000 - Technical Occupations		
30010 - Air Traffic Control Specialist, Center (HFO) (2)		34.71
30011 - Air Traffic Control Specialist, Station (HFO) (2)		23.94
30012 - Air Traffic Control Specialist, Terminal (HFO) (2)		26.36
30021 - Archeological Technician I		17.06
30022 - Archeological Technician II		19.03
30023 - Archeological Technician III		23.76
30030 - Cartographic Technician		24.85
30040 - Civil Engineering Technician		22.19
30061 - Drafter/CAD Operator I		17.92
30062 - Drafter/CAD Operator II		20.06
30063 - Drafter/CAD Operator III		22.36
30064 - Drafter/CAD Operator IV		27.51
30081 - Engineering Technician I		20.19
30082 - Engineering Technician II		22.67
30083 - Engineering Technician III		25.37
30084 - Engineering Technician IV		31.43
30085 - Engineering Technician V		38.44
30086 - Engineering Technician VI		46.51
30090 - Environmental Technician		21.36
30210 - Laboratory Technician		22.36
30240 - Mathematical Technician		26.31
30361 - Paralegal/Legal Assistant I		20.03
30362 - Paralegal/Legal Assistant II		24.82
30363 - Paralegal/Legal Assistant III		30.35
30364 - Paralegal/Legal Assistant IV		36.73
30390 - Photo-Optics Technician		24.85
30461 - Technical Writer I	20.69	
30462 - Technical Writer II		25.30
30463 - Technical Writer III		30.61
30491 - Unexploded Ordnance (UXO) Technician I		22.06
30492 - Unexploded Ordnance (UXO) Technician II		26.69
30493 - Unexploded Ordnance (UXO) Technician III		31.99
30494 - Unexploded (UXO) Safety Escort		22.06
30495 - Unexploded (UXO) Sweep Personnel		22.06
30620 - Weather Observer, Combined Upper Air Or Surface Programs (2)		22.14
30621 - Weather Observer, Senior (2)		23.98
31000 - Transportation/Mobile Equipment Operation Occupations		
31020 - Bus Aide		11.99
31030 - Bus Driver		17.54

31043 - Driver Courier	12.71
31260 - Parking and Lot Attendant	9.06
31290 - Shuttle Bus Driver	13.89
31310 - Taxi Driver	13.98
31361 - Truckdriver, Light	13.89
31362 - Truckdriver, Medium	17.09
31363 - Truckdriver, Heavy	18.40
31364 - Truckdriver, Tractor-Trailer	18.40
99000 - Miscellaneous Occupations	
99030 - Cashier	10.03
99050 - Desk Clerk	10.45
99095 - Embalmer	21.77
99251 - Laboratory Animal Caretaker I	10.47
99252 - Laboratory Animal Caretaker II	10.85
99310 - Mortician	27.25
99410 - Pest Controller	14.54
99510 - Photofinishing Worker	11.59
99710 - Recycling Laborer	15.73
99711 - Recycling Specialist	18.72
99730 - Refuse Collector	14.01
99810 - Sales Clerk	11.87
99820 - School Crossing Guard	11.37
99830 - Survey Party Chief	19.76
99831 - Surveying Aide	12.28
99832 - Surveying Technician	18.78
99840 - Vending Machine Attendant	12.61
99841 - Vending Machine Repairer	16.37
99842 - Vending Machine Repairer Helper	12.61

ALL OCCUPATIONS LISTED ABOVE RECEIVE THE FOLLOWING BENEFITS:

HEALTH & WELFARE: $3.16 per hour or $126.40 per week or $547.73 per month

VACATION: 2 weeks paid vacation after 1 year of service with a contractor or successor; 3 weeks after 5 years, and 4 weeks after 15 years. Length of service includes the whole span of continuous service with the present contractor or successor, wherever employed, and with the predecessor contractors in the performance of similar work at the same Federal facility. (Reg. 29 CFR 4.173)

HOLIDAYS: A minimum of ten paid holidays per year, New Year's Day, Martin Luther King Jr's Birthday, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Columbus Day, Veterans' Day, Thanksgiving Day, and Christmas Day. (A contractor may substitute for any of the named holidays another day off with pay in accordance with a plan communicated to the employees involved.) (See 29 CFR 4174)

THE OCCUPATIONS WHICH HAVE PARENTHESES AFTER THEM RECEIVE THE FOLLOWING BENEFITS (as numbered):

1) Does not apply to employees employed in a bona fide executive, administrative, or professional capacity as defined and delineated in 29 CFR 541. (See CFR 4.156)

2) AIR TRAFFIC CONTROLLERS AND WEATHER OBSERVERS - NIGHT PAY & SUNDAY PAY: If you work at night as part of a regular tour of duty, you will earn a night differential and receive an additional 10% of basic pay for any hours worked between 6pm and 6am. If you are a full-time employed (40 hours a week) and Sunday is part of your

regularly scheduled workweek, you are paid at your rate of basic pay plus a Sunday premium of 25% of your basic rate for each hour of Sunday work which is not overtime (i.e. occasional work on Sunday outside the normal tour of duty is considered overtime work).

HAZARDOUS PAY DIFFERENTIAL: An 8 percent differential is applicable to employees employed in a position that represents a high degree of hazard when working with or in close proximity to ordinance, explosives, and incendiary materials. This includes work such as screening, blending, dying, mixing, and pressing of sensitive ordance, explosives, and pyrotechnic compositions such as lead azide, black powder and photoflash powder. All dry-house activities involving propellants or explosives. Demilitarization, modification, renovation, demolition, and maintenance operations on sensitive ordnance, explosives and incendiary materials. All operations involving regrading and cleaning of artillery ranges.

A 4 percent differential is applicable to employees employed in a position that represents a low degree of hazard when working with, or in close proximity to ordance, (or employees possibly adjacent to) explosives and incendiary materials which involves potential injury such as laceration of hands, face, or arms of the employee engaged in the operation, irritation of the skin, minor burns and the like; minimal damage to immediate or adjacent work area or equipment being used. All operations involving, unloading, storage, and hauling of ordance, explosive, and incendiary ordnance material other than small arms ammunition. These differentials are only applicable to work that has been specifically designated by the agency for ordance, explosives, and incendiary material differential pay.

** UNIFORM ALLOWANCE **

If employees are required to wear uniforms in the performance of this contract (either by the terms of the Government contract, by the employer, by the state or local law, etc.), the cost of furnishing such uniforms and maintaining (by laundering or dry cleaning) such uniforms is an expense that may not be borne by an employee where such cost reduces the hourly rate below that required by the wage determination. The Department of Labor will accept payment in accordance with the following standards as compliance:

The contractor or subcontractor is required to furnish all employees with an adequate number of uniforms without cost or to reimburse employees for the actual cost of the uniforms. In addition, where uniform cleaning and maintenance is made the responsibility of the employee, all contractors and subcontractors subject to this wage determination shall (in the absence of a bona fide collective bargaining agreement providing for a different amount, or the furnishing of contrary affirmative proof as to the actual cost), reimburse all employees for such cleaning and maintenance at a rate of $3.35 per week (or $.67 cents per day). However, in those instances where the uniforms furnished are made of "wash and wear" materials, may be routinely washed and dried with other personal garments, and do not require any special treatment such as dry cleaning, daily washing, or commercial laundering in order to meet the cleanliness or appearance standards set by the terms of the Government contract, by the contractor, by law, or by the nature of the work, there is no requirement that employees be reimbursed for uniform maintenance costs.

The duties of employees under job titles listed are those described in the "Service Contract Act Directory of Occupations", Fifth Edition, April 2006, unless otherwise indicated. Copies of the Directory are available on the Internet. A links to the Directory may be found on the WHD home page at http://www.dol.gov/esa/whd/ or through the Wage Determinations On-Line (WDOL) Web site at http://wdol.gov/.

REQUEST FOR AUTHORIZATION OF ADDITIONAL CLASSIFICATION AND WAGE RATE {Standard Form

1444 (SF 1444)}

Conformance Process:

The contracting officer shall require that any class of service employee which is not listed herein and which is to be employed under the contract (i.e., the work to be performed is not performed by any classification listed in the wage determination), be classified by the contractor so as to provide a reasonable relationship (i.e., appropriate level of skill comparison) between such unlisted classifications and the classifications listed in the wage determination. Such conformed classes of employees shall be paid the monetary wages and furnished the fringe benefits as are determined. Such conforming process shall be initiated by the contractor prior to the performance of contract work by such unlisted class(es) of employees. The conformed classification, wage rate, and/or fringe benefits shall be retroactive to the commencement date of the contract. {See Section 4.6 (C)(vi)} When multiple wage determinations are included in a contract, a separate SF 1444 should be prepared for each wage determination to which a class(es) is to be conformed.

The process for preparing a conformance request is as follows:

1) When preparing the bid, the contractor identifies the need for a conformed occupation) and computes a proposed rate).

2) After contract award, the contractor prepares a written report listing in order proposed classification title), a Federal grade equivalency (FGE) for each proposed classification), job description), and rationale for proposed wage rate), including information regarding the agreement or disagreement of the authorized representative of the employees involved, or where there is no authorized representative, the employees themselves. This report should be submitted to the contracting officer no later than 30 days after such unlisted class(es) of employees performs any contract work.

3) The contracting officer reviews the proposed action and promptly submits a report of the action, together with the agency's recommendations and pertinent information including the position of the contractor and the employees, to the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, for review. (See section 4.6(b)(2) of Regulations 29 CFR Part 4).

4) Within 30 days of receipt, the Wage and Hour Division approves, modifies, or disapproves the action via transmittal to the agency contracting officer, or notifies the contracting officer that additional time will be required to process the request.

5) The contracting officer transmits the Wage and Hour decision to the contractor.

6) The contractor informs the affected employees.

Information required by the Regulations must be submitted on SF 1444 or bond paper.

When preparing a conformance request, the "Service Contract Act Directory of Occupations" (the Directory) should be used to compare job definitions to insure that duties requested are not performed by a classification already listed in the wage determination. Remember, it is not the job title, but the required tasks that determine whether a class is included in an established wage determination. Conformances may not be used to artificially split, combine, or subdivide classifications listed in the wage determination.

SECTION B

SUPPLIES OR SERVICES AND PRICES/COSTS

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SECTION B

SUPPLIES OR SERVICES AND PRICES/COSTS

B.1 GENERAL PURPOSE

The contractor shall furnish all of the necessary equipment, labor, and supplies to perform tours, inspections, basic operation, preventive maintenance, minor repairs, and general housekeeping for the Utility Distribution System. Work is to be performed at various locations throughout the U.S. Capitol Complex under the jurisdiction of the Architect of the Capitol as scheduled in the article entitled "SCHEDULE OF ITEMS" in this section, for use under the jurisdiction of the Architect of the Capitol, Washington, D.C. (See the article entitled "DELIVERY REQUIREMENTS" in Section F.) Work is to be performed on a Firm Fixed Price basis, with Firm Fixed Price task orders

B.2 UNIT PRICES

The unit prices (hourly labor rates) provided shall be fully loaded rates to include O/H, G&A, and profit/fee.

B.3 SCHEDULE OF ITEMS

BASE YEAR - FY 2008
Award of Contract through September 30, 2008

	Labor Category	S.T. Labor Rate (Fully Burdened)		*Estimated Hours		Total Hour Rate
001.	Services of one (1) Licensed Journeyman Electrician (Rate to reflect straight time scheduled repairs/maintenance/inspection services)					
	Straight Time Rate $_____					
	Overtime Rate $_____					
	Double Time Rate $_____					
	Holiday Rate $_____	$_____	X	300		$_____

002. Services of one (1) Electrician Helper (Rate to reflect straight time scheduled repairs/maintenance/inspection services)

Straight Time Rate $_____

Overtime Rate $_____

Double Time Rate $_____

Holiday Rate $_____ $_____ X 300 $_____

003. Services of one (1) General Maintenance Mechanic (Rate to reflect straight time scheduled repairs/maintenance/inspection services) . . . . . .

Straight Time Rate $_____

Overtime Rate $_____

Double Time Rate $_____

Holiday Rate $_____ $_____ X 300 $_____

004. Services of one (1) Licensed Journeyman Pipefitter/Welder (Rate to reflect straight time scheduled repairs/maintenance/inspection services)

Straight Time Rate $_____

Overtime Rate $_____ X

Double Time Rate $_____

Holiday Rate $_____ $_____

300 $_____

005. Services of one (1) Pipefitter (Rate to reflect straight time scheduled repairs/maintenance/inspection services)

Straight Time Rate $_____

Overtime Rate $_____

Double Time Rate $_____

Holiday Rate $_____ $_____ X 300 $_____

006. Services of one (1) Labor Leader (Rate to reflect straight time scheduled repairs/maintenance/inspection services)

Straight Time Rate $_____

Overtime Rate $_____

Double Time Rate $_____

Holiday Rate $_____ $_____ X 300 $_____

007. Services of one (1) Laborer (Rate to reflect straight time scheduled repairs/maintenance/inspection services)

Straight Time Rate $_____

Overtime Rate $_____

Double Time Rate $_____

Holiday Rate $_____ $_____ X 300 $_____

008. Services of one (1) Certified Industrial Hygienist (Rate to reflect straight time scheduled repairs/maintenance/inspection services) . . . . . .

Straight Time Rate $_____

Overtime Rate $_____

Double Time Rate $_____

Holiday Rate $_____ $_____ X 300 $_____

009. Services of one (1) Industrial Hygienist (Rate to reflect straight time scheduled repairs/maintenance/inspection services)

Straight Time Rate $_____

Overtime Rate $_____

Double Time Rate $_____

Holiday Rate $_____ $_____ X 300 $_____

010. Services of one (1) Office Assistant (Rate to reflect straight time scheduled repairs/maintenance/inspection services)

Straight Time Rate $_____

Overtime Rate $_____

Double Time Rate $_____

Holiday Rate $_____ $_____ X 300 $_____

011. Services of one (1) Instrumentation and Controls Technician (Rate to reflect straight time scheduled repairs/maintenance/inspection services)

Straight Time Rate $_____

Overtime Rate $_____

Double Time Rate $_____

Holiday Rate $_____ $_____ X 300 $_____

Total of extended Hour Rate for Items No. 001 through 011, inclusive, for Base Year Amount . . . . . $_____

	Services	Monthly Rate	*Estimated Quantity	Total Price
012.	Basic Inspection Services including daily tours, inspections, operation, preventative maintenance, minor corrective maintenance, and general housekeeping as defined in Section C to be performed by a crew consisting of seven (7) employees, including one (1) inspection team	$_____ X	12	$_____
013.	Basic Inspection Services including daily tours, inspections, operation, preventative maintenance, minor corrective maintenance, and general housekeeping as defined in Section C to be performed by a crew consisting of ten (10) employees, including two (2) inspection teams	$_____ X	12	$_____

Total of extended Hour Rate for Items No. 011 through 013, inclusive, for Base Year Amount . . . . . $_____

Total of extended Hour Rate for Items No. 001 through 011, and total of extended Unit Prices for Items No. 012 through 013, inclusive, for Base Year Amount . . . . $_____

Option Year No. 1 - FY 2009

October 1, 2008 through September 30, 2009

	Labor Category	S.T. Labor Rate (Fully Burdened)	*Estimated Hours	Total Hour Rate
001.	Services of one (1) Licensed Journeyman Electrician (Rate to reflect straight time scheduled repairs/maintenance/inspection services)			
	Straight Time Rate $_____			
	Overtime Rate $_____			
	Double Time Rate $_____			
	Holiday Rate $_____	$_____ X	300	$_____
002.	Services of one (1) Electrician Helper (Rate to reflect straight time scheduled repairs/maintenance/inspection services)			
	Straight Time Rate $_____			
	Overtime Rate $_____			
	Double Time Rate $_____			
	Holiday Rate $_____	$_____ X	300	$_____

003. Services of one (1) General Maintenance Mechanic (Rate to reflect straight time scheduled repairs/maintenance/inspection services) . . . . . .

Straight Time Rate $_____

Overtime Rate $_____

Double Time Rate $_____

Holiday Rate $_____ $_____ X 300 $_____

004. Services of one (1) Licensed Journeyman Pipefitter/Welder (Rate to reflect straight time scheduled repairs/maintenance/inspection services)

Straight Time Rate $_____

Overtime Rate $_____

Double Time Rate $_____

Holiday Rate $_____ $_____ X 300 $_____

005. Services of one (1) Pipefitter (Rate to reflect straight time scheduled repairs/maintenance/inspection services)

Straight Time Rate $_____

Overtime Rate $_____

Double Time Rate $_____

Holiday Rate $_____ $_____ X 300 $_____

006. Services of one (1) Labor Leader (Rate to reflect straight time scheduled repairs/maintenance/inspection services)

Straight Time Rate $_____

Overtime Rate $_____

Double Time Rate $_____

Holiday Rate $_____ $_____ X 300 $_____

007. Services of one (1) Laborer (Rate to reflect straight time scheduled repairs/maintenance/inspection services)

Straight Time Rate $_____

Overtime Rate $_____

Double Time Rate $_____

Holiday Rate $_____ $_____ X 300 $_____

008. Services of one (1) Certified Industrial Hygienist (Rate to reflect straight time scheduled repairs/maintenance/inspection services) . . . . . .

Straight Time Rate $_____

Overtime Rate $_____

Double Time Rate $_____

Holiday Rate $_____ $_____ X 300 $_____

009. Services of one (1) Industrial Hygienist (Rate to reflect straight time scheduled repairs/maintenance/inspection services)

Straight Time Rate $_____

Overtime Rate $_____

Double Time Rate $_____

Holiday Rate $_____ $_____ X 300 $_____

010. Services of one (1) Office Assistant (Rate to reflect straight time scheduled repairs/maintenance/inspection services)

Straight Time Rate $_____

Overtime Rate $_____

Double Time Rate $_____

Holiday Rate $_____ $_____ X 300 $_____

011. Services of one (1) Instrumentation and Controls Technician (Rate to reflect straight time scheduled repairs/maintenance/inspection services)

Straight Time Rate $_____

Overtime Rate $_____

Double Time Rate $_____

Holiday Rate $_____ $_____ X 300 $_____

Total of extended Hour Rate for Items No. 001 through 011, inclusive, for Option Year No. 1 Amount . . . . . $_____

	Services	**Monthly Rate**		***Estimated Quantity**	**Total Price**
012.	Basic Inspection Services including daily tours, inspections, operation, preventative maintenance, minor corrective maintenance, and general housekeeping as defined in Section C to be performed by a crew consisting of seven (7) employees, including one (1) inspection team	$_____	X	12	$_____
013.	Basic Inspection Services including daily tours, inspections, operation, preventative maintenance, minor corrective maintenance, and general housekeeping as defined in Section C to be performed by a crew consisting of ten (10) employees, including two (2) inspection teams	$_____	X	12	$_____

Total of extended Hour Rate for Items No. 012 through 013, inclusive, for Option Year No. 1 Amount . . . . . $_____

Total of extended Hour Rate for Items No. 001 through 011, and total of extended Unit Prices for Items No. 012 through 013, inclusive, for Option Year No. 1 Amount . . . . . $_____

Option Year No. 2 - FY 2010

October 1, 2009 through September 30, 2010

Labor Category	**S.T. Labor Rate (Fully Burdened)**	***Estimated Hours**	**Total Hour Rate**

001. Services of one (1) Licensed Journeyman Electrician (Rate to reflect straight time scheduled repairs/maintenance/inspection services) . . . . . .

Straight Time Rate $_____

Overtime Rate $_____

Double Time Rate $_____

Holiday Rate $_____ $_____ X 300 $_____

002. Services of one (1) Electrician Helper (Rate to reflect straight time scheduled repairs/maintenance/inspection services)

Straight Time Rate $_____

Overtime Rate $_____

Double Time Rate $_____

Holiday Rate $_____ $_____ X 300 $_____

003. Services of one (1) General Maintenance Mechanic (Rate to reflect straight time scheduled repairs/maintenance/inspection services) . . . . . .

Straight Time Rate $_____

Overtime Rate $_____

Double Time Rate $_____

Holiday Rate $_____ $_____ X 300 $_____

004. Services of one (1) Licensed Journeyman Pipefitter/Welder (Rate to reflect straight time scheduled repairs/maintenance/inspection services)

Straight Time Rate $_____

Overtime Rate $_____

Double Time Rate $_____

Holiday Rate $_____ $_____ X 300 $_____

005. Services of one (1) Pipefitter (Rate to reflect straight time scheduled repairs/maintenance/inspection services)

Straight Time Rate $_____

Overtime Rate $_____

Double Time Rate $_____

Holiday Rate $_____ $_____ X 300 $_____

006. Services of one (1) Labor Leader (Rate to reflect straight time scheduled repairs/maintenance/inspection services)

Straight Time Rate $_____

Overtime Rate $_____

Double Time Rate $_____

Holiday Rate $_____ $_____ X 300 $_____

007. Services of one (1) Laborer (Rate to reflect straight time scheduled repairs/maintenance/inspection services)

Straight Time Rate $_____

Overtime Rate $_____

Double Time Rate $_____

Holiday Rate $_____ $_____ X 300 $_____

008. Services of one (1) Certified Industrial Hygienist (Rate to reflect straight time scheduled repairs/maintenance/inspection services) . . . . . .

Straight Time Rate $_____

Overtime Rate $_____

Double Time Rate $_____

Holiday Rate $_____ $_____ X 300 $_____

009. Services of one (1) Industrial Hygienist (Rate to reflect straight time scheduled repairs/maintenance/inspection services)

Straight Time Rate $_____

Overtime Rate $_____

Double Time Rate $_____

Holiday Rate $_____ $_____ X 300 $_____

010. Services of one (1) Office Assistant (Rate to reflect straight time scheduled repairs/maintenance/inspection services)

Straight Time Rate $_____

Overtime Rate $_____

Double Time Rate $_____

Holiday Rate $_____ $_____ X 300 $_____

011. Services of one (1) Instrumentation and Controls Technician (Rate to reflect straight time scheduled repairs/maintenance/inspection services)

Straight Time Rate $_____

Overtime Rate $_____

Double Time Rate $_____

Holiday Rate $_____ $_____ X 300 $_____

Total of extended Hour Rate for Items No. 001 through 011, inclusive, for Option Year No. 2 Amount . . . . . $_____

	Services	Monthly Rate		*Estimated Quantity	Total Price
012	Basic Inspection Services including daily tours, inspections, operation, preventative maintenance, minor corrective maintenance, and general housekeeping as defined in Section C to be performed by a crew consisting of seven (7) employees, including one (1) inspection team	$_____	X	12	$_____
013.	Basic Inspection Services including daily tours, inspections, operation, preventative maintenance, minor corrective maintenance, and general housekeeping as defined in Section C to be performed by a crew consisting of ten (10) employees, including two (2) inspection teams	$_____	X	12	$_____

Total of extended Hour Rate for Items No. 012 through 013, inclusive, for Option Year No. 2 Amount . . . . . $_____

Total of extended Hour Rate for Items No. 001 through 011, and total of extended Unit Prices for Items No. 012 through 013, inclusive, for Option Year No. 2 Amount . . . . . $_____

Option Year No. 3 - FY 2011

October 1, 2010 through September 30, 2011

Labor Category	S.T. Labor Rate (Fully Burdened)	*Estimated Hours	Total Hour Rate

001. Services of one (1) Licensed Journeyman Electrician (Rate to reflect straight time scheduled repairs/maintenance/inspection services) . . . . . .

Straight Time Rate $_____

Overtime Rate $_____

Double Time Rate $_____

Holiday Rate $_____ $_____ X 300 $_____

002. Services of one (1) Electrician Helper (Rate to reflect straight time scheduled repairs/maintenance/inspection services)

Straight Time Rate $_____

Overtime Rate $_____

Double Time Rate $_____

Holiday Rate $_____ $_____ X 300 $_____

003. Services of one (1) General Maintenance Mechanic (Rate to reflect straight time scheduled repairs/maintenance/inspection services) . . . . . .

Straight Time Rate $_____

Overtime Rate $_____

Double Time Rate $_____

Holiday Rate $_____ $_____ X 300 $_____

004. Services of one (1) Licensed Journeyman Pipefitter/Welder (Rate to reflect straight time scheduled repairs/maintenance/inspection services)

Straight Time Rate $_____

Overtime Rate $_____

Double Time Rate $_____

Holiday Rate $_____ $_____ X 300 $_____

005. Services of one (1) Pipefitter (Rate to reflect straight time scheduled repairs/maintenance/inspection services)

Straight Time Rate $_____

Overtime Rate $_____

Double Time Rate $_____

Holiday Rate $_____ $_____ X 300 $_____

006. Services of one (1) Labor Leader (Rate to reflect straight time scheduled repairs/maintenance/inspection services)

Straight Time Rate $_____

Overtime Rate $_____

Double Time Rate $_____

Holiday Rate $_____ $_____ X 300 $_____

007. Services of one (1) Laborer (Rate to reflect straight time scheduled repairs/maintenance/inspection services)

Straight Time Rate $_____

Overtime Rate $_____

Double Time Rate $_____

Holiday Rate $_____ $_____ X 300 $_____

008. Services of one (1) Certified Industrial Hygienist (Rate to reflect straight time scheduled repairs/maintenance/inspection services) . . . . . .

Straight Time Rate $_____

Overtime Rate $_____

Double Time Rate $_____

Holiday Rate $_____ $_____ X 300 $_____

009. Services of one (1) Industrial Hygienist (Rate to reflect straight time scheduled repairs/maintenance/inspection services)

Straight Time Rate $_____

Overtime Rate $_____

Double Time Rate $_____

Holiday Rate $_____ $_____ X 300 $_____

010. Services of one (1) Office Assistant (Rate to reflect straight time scheduled repairs/maintenance/inspection services)

Straight Time Rate $_____

Overtime Rate $_____

Double Time Rate $_____

Holiday Rate $_____ $_____ X 300 $_____

011. Services of one (1) Instrumentation and Controls Technician (Rate to reflect straight time scheduled repairs/maintenance/inspection services)

Straight Time Rate $_____

Overtime Rate $_____

Double Time Rate $_____

Holiday Rate $_____ $_____ X 300 $_____

Total of extended Hour Rate for Items No. 001 through 011, inclusive, for Option Year No. 3 Amount . . . . . $_____

	Services	Monthly Rate		*Estimated Quantity	Total Price
012	Basic Inspection Services including daily tours, inspections, operation, preventative maintenance, minor corrective maintenance, and general housekeeping as defined in Section C to be performed by a crew consisting of seven (7) employees, including one (1) inspection team	$_____	X	12	$_____
013	Basic Inspection Services including daily tours, inspections, operation, preventative maintenance, minor corrective maintenance, and general housekeeping as defined in Section C to be performed by a crew consisting of ten (10) employees, including two (2) inspection teams	$_____	X	12	$_____

Total of extended Hour Rate for Items No. 012 through 013, inclusive, for Option Year No. 3 Amount . . . . . $_____

Total of extended Hour Rate for Items No. 001 through 011, and total of extended Unit Prices for Items No. 012 through 013, inclusive, for Option Year No. 3 Amount . . . . . $_____

Option Year No. 4 - FY 2012

October 1, 2011 through September 30, 2012

	Labor Category	S.T. Labor Rate (Fully Burdened)		*Estimated Hours	Total Hour Rate
001.	Services of one (1) Licensed Journeyman Electrician (Rate to reflect straight time scheduled repairs/maintenance/inspection services)				
	Straight Time Rate $_____				
	Overtime Rate $_____				
	Double Time Rate $_____				
	Holiday Rate $_____	$_____	X	300	$_____

002. Services of one (1) Electrician Helper (Rate to reflect straight time scheduled repairs/maintenance/inspection services)

Straight Time Rate $_____

Overtime Rate $_____

Double Time Rate $_____

Holiday Rate $_____ $_____ X 300 $_____

003. Services of one (1) General Maintenance Mechanic (Rate to reflect straight time scheduled repairs/maintenance/inspection services) . . . . . .

Straight Time Rate $_____

Overtime Rate $_____

Double Time Rate $_____

Holiday Rate $_____ $_____ X 300 $_____

004. Services of one (1) Licensed Journeyman Pipefitter/Welder (Rate to reflect straight time scheduled repairs/maintenance/inspection services)

Straight Time Rate $_____

Overtime Rate $_____

Double Time Rate $_____

Holiday Rate $_____ $_____ X 300 $_____

005. Services of one (1) Pipefitter (Rate to reflect straight time scheduled repairs/maintenance/inspection services)

Straight Time Rate $_____

Overtime Rate $_____

Double Time Rate $_____

Holiday Rate $_____ $_____ X 300 $_____

006. Services of one (1) Labor Leader (Rate to reflect straight time scheduled repairs/maintenance/inspection services)

Straight Time Rate $_____

Overtime Rate $_____

Double Time Rate $_____

Holiday Rate $_____ $_____ X 300 $_____

007. Services of one (1) Laborer (Rate to reflect straight time scheduled repairs/maintenance/inspection services)

Straight Time Rate $_____

Overtime Rate $_____

Double Time Rate $_____

Holiday Rate $_____ $_____ X 300 $_____

008. Services of one (1) Certified Industrial Hygienist (Rate to reflect straight time scheduled repairs/maintenance/inspection services) . . . . . .

Straight Time Rate $_____

Overtime Rate $_____

Double Time Rate $_____

Holiday Rate $_____ $_____ X 300 $_____

009. Services of one (1) Industrial Hygienist (Rate to reflect straight time scheduled repairs/maintenance/inspection services)

Straight Time Rate $_____

Overtime Rate $_____

Double Time Rate $_____

Holiday Rate $_____ $_____ X 300 $_____

010. Services of one (1) Office Assistant (Rate to reflect straight time scheduled repairs/maintenance/inspection services)

Straight Time Rate $_____

Overtime Rate $_____

Double Time Rate $_____

Holiday Rate $_____ $_____ X 300 $_____

011. Services of one (1) Instrumentation and Controls Technician (Rate to reflect straight time scheduled repairs/maintenance/inspection services)

Straight Time Rate $_____

Overtime Rate $_____

Double Time Rate $_____

Holiday Rate $_____ $_____ X 300 $_____

Total of extended Hour Rate for Items No. 001 through 011, inclusive, for Option Year No. 4 Amount . . . . . $_____

	Services	**Monthly Rate**		***Estimated Quantity**	**Total Price**
012.	Basic Inspection Services including daily tours, inspections, operation, preventative maintenance, minor corrective maintenance, and general housekeeping as defined in Section C to be performed by a crew consisting of seven (7) employees, including one (1) inspection team	$_____	X	12	$_____
013.	Basic Inspection Services including daily tours, inspections, operation, preventative maintenance, minor corrective maintenance, and general housekeeping as defined in Section C to be performed by a crew consisting of ten (10) employees, including two (2) inspection teams	$_____	X	12	$_____

Total of extended Hour Rate for Items No. 012 through 013, inclusive, for Option Year No. 4 Amount . . . . . $_____

Total of extended Hour Rate for Items No. 001 through 011, and total of extended Unit Prices for Items No. 012 through 013, inclusive, for Option Year No. 4 Amount . . . . . $_____

TOTAL PRICE (Totals for Base Year and Option Years No. 1 through 4), inclusive $_____

* The hours per labor category and material quantities presented herein are estimates only and their inclusion herein does not bind the Government to the procurement of the exact man-hours or quantities listed above.

B.4 OVERTIME WORK (AOC) (APR 2004)

No extra reimbursement will be allowed for work performed outside normal hours of operation or on Saturdays, Sundays, or holidays, unless such work is authorized by the Contracting Officer; and provided such work is not otherwise required to be performed under the terms of the contract. If said authorization is verbal, with written verification thereof by signature of the Contracting Officer on the employee's weekly time record (see the article entitled "PAYMENTS" in Section G).

END OF SECTION B

UNIFORM ASBESTOS MANAGEMENT PROGRAM

May 1, 1997

THE OFFICE OF THE ARCHITECT OF THE CAPITOL
Uniform Asbestos Management Program

EXECUTIVE SUMMARY:

This program was designed to responsibly meet government requirements, typical guidelines and good business practices for properly working with asbestos. The scope of the program is well defined and gives all the information needed in order to properly complete necessary work, while at the same time, protecting the health of workers, staff and visitors to the United States Capitol Complex.

Responsibilities are detailed very early in the text of the program that leave no doubt about what duties each position is assigned to do. Two keys to successful operation are: 1) how each Superintendent, Supervising Engineer, etc. applies the policy to their organization of individuals, and 2) the buy-in to the program by each AOC employee who contacts asbestos and knows what their individual responsibilities are.

The program also lists the references and resources that are needed to do assigned jobs in accordance with the rules. Also available is a list of the terminology that is needed to understand what people are talking about when they discuss the subject.

Training requirements are also detailed, not only the types of training, but WHO should receive what kind of training and at what interval. Another requirement that is spelled-out is the requirement for the need for physicals to met medical surveillance code requirements.

Perhaps one of the most important ideas covered by the program are the requirements for a respiratory protection program. These programs help assure the good physical condition of the human resources that are needed to successfully deal with asbestos.

The remainder of the program deals with defining the various program elements that mesh together in order to start, continue and finish the work safely. These elements include area air samples, personal air samples, final air clearances, bulk sampling, inspections; and asbestos management procedures such as initial field inspections, mandatory notifications, emergency operations, glove bag removal operations, containment abatement project operations, removal of asbestos containing floor tiles, removal of asbestos containing transite panels, repair - operations and maintenance (O&M) tasks, waste disposal procedures, recordkeeping requirements, required records/forms and directions on how to use them, and testing of HEPA-filtered equipment.

The program allows for additions, deletions and corrections. It requires reviews at six month intervals, so that adjustments can be made. It is a living document and remains flexible enough to cope with regulatory and personnel changes.

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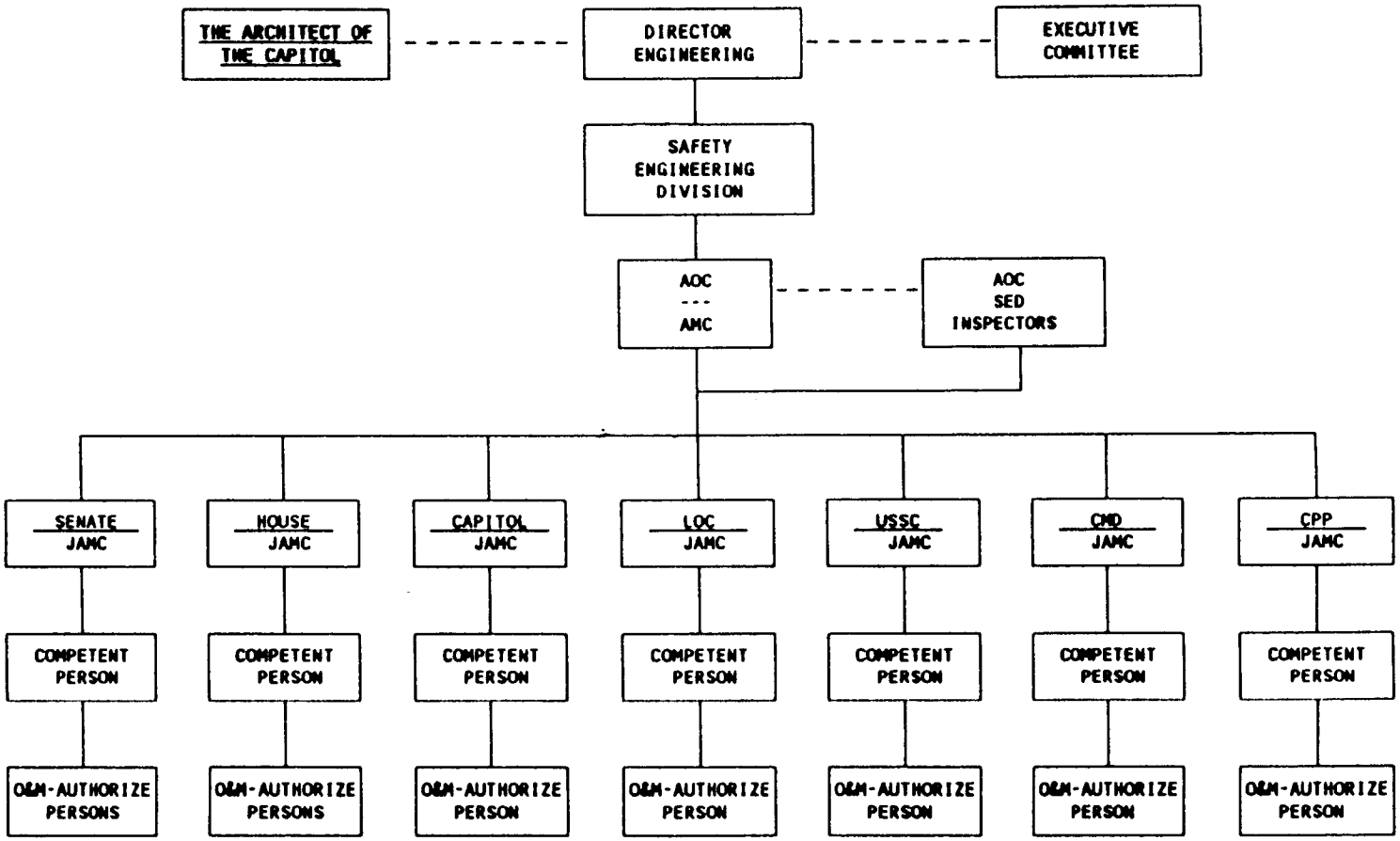
The Office of the Architect of the Capitol --- Uniform Asbestos Management Program



KEY:

AOC:. . . . . THE OFFICE OF THE ARCHITECT OF THE CAPITOL
AOC-AMC:. . . . . AOC Asbestos Management Coordinator; with EPA Project Design, Inspector and Supervisor Accreditation
CPP: . . . . . U.S. Capitol Power Plant
JAMC: . . . . . Jurisdiction Asbestos Management Coordinator; with EPA Supervisor Accreditation
USSC: . . . . . Supreme Court
LOC:. . . . . Library of Congress
CMD:. . . . . Construction Management and Construction Branch
O&M PERSON: . . . . . Person; with EPA Accreditation in Operations & Maintenance Activities
COMPETENT PERSON: . . Person; with EPA Supervisor Accreditation
AUTHORIZED PERSON:. . Person; with EPA Worker Accreditation

AoC UNIFORM ASBESTOS MANAGEMENT PROGRAM

SECTION 1.0 --- INTRODUCTION

1.1 This program shall be known as the UNIFORM ASBESTOS MANAGEMENT PROGRAM (UAMP) of the Office of the Architect of the Capitol (AOC).

1.2 The guidance set forth in this document supersedes all preceding policy efforts.

1.3 The purposes of this program are to:
1.3.1 provide a consistent approach to asbestos management that has as its goal the protection of human health and the environment;
1.3.2 convey that asbestos containing materials (ACM) can be found in the buildings under the jurisdiction of the AOC. ACM and presumed asbestos-containing materials (PACM) may be legally and successfully managed in-place;
1.3.3 incorporate state-of-the-art practices or at least exceed the minimum standard of care; and
1.3.4 comply with regulatory requirements.
1.3.5 This program, which is based on current regulatory requirements and industry practices, shall be followed in all facilities under the jurisdiction of the Office of the Architect of the Capitol, to include AOC employees, AOC contractors, and any other group working with ACM or PACM.

1.4 Work activities described herein shall, when judgement is required, select options providing a higher degree of protection, i.e., equaling or exceeding typical regulations. Activities that involve asbestos-containing materials (ACM) and presumed asbestos-containing materials (PACM) shall be conducted in a manner that minimizes the release of asbestos fibers into the air. If fibers are released, proper control and cleanup procedures shall be used.

1.5 All AOC employees are expected to give a good faith and serious effort towards compliance.

SECTION 2.0 --- DEFINITIONS and ABBREVIATIONS

Refer to **APPENDIX 2.**

SECTION 3.0 --- SCOPE and APPLICABILITY

The UAMP covers the following:
3.1 Personal responsibilities;

3.2 Requirements for building occupant and worker protection;

3.3 Procedures for the identification, maintenance, and removal of ACM, including compliance inspection and sampling methodology; and

3.4 Recordkeeping requirements.

SECTION 4.0 --- ASSIGNED RESPONSIBILITIES

Specific responsibilities apply to the ---
4.1 **Director of Engineering (DOE):**
4.1.1 The DOE is the DESIGNATED AGENCY SAFETY & HEALTH OFFICER (DASHO). The DOE has the responsibility for the oversight and operation of the UAMP.

4.1.2 The DOE receives his guidance from ***THE ARCHITECT OF THE CAPITOL***, who has the ultimate responsibility to ensure the development and implementation of a UAMP that complies with current Federal laws, regulations and guidelines and incorporates industry standards relating to asbestos management. ***THE ARCHITECT OF THE CAPITOL*** shall, through the DOE, seek feedback that demonstrates continued, proper levels of performance.

4.1.3 The DOE may call upon and consult with members of the ***EXECUTIVE COMMITTEE*** for guidance and assistance in the development, review and implementation of this program.

4.2 **The Safety Engineering Division (SED):** Day-to-day operational responsibilities for the UAMP are passed to the SED. Responsibilities include:

4.2.1 Arranging the appointment of an **AOC Asbestos Management Coordinator(s)**. These individuals shall be responsible for guiding and assisting **Jurisdiction Asbestos Management Coordinators** in integrating this program into their day-to-day operations. The **AOC Asbestos Management Coordinator** shall be responsible for the day-to-day supervision of the **SED Inspectors** described immediately below, and may directly delegate responsibilities to same as needed.

4.2.2 Maintenance of a staff of trained, accredited and experienced **SED Inspectors** who are authorized to perform asbestos abatement and Operations and Maintenance (O&M) compliance inspections. Duties shall include:

(a) Initial inspection of containments, including issuing notices to proceed;

(b) Area air sampling; and

(c) Post-abatement visual inspections, planning and selection of final clearance criteria, completion of final air sampling, and authorization for containment teardown.

*(d) **NOTE:** AOC Asbestos Management Coordinators, Jurisdiction Asbestos Management Coordinators, and SED Inspectors have the authority to stop any unsafe or unhealthful work practices related to ACM or PACM.*

4.2.4 Development and update of the AOC UAMP. The program shall be reviewed every six months to ensure compliance with current regulatory requirements; and when necessary, modify them to reflect changed practices;

4.2.5 Establishment and maintenance of a reporting system that provides the AOC with timely information on all asbestos activities;

4.2.6 Establishment and maintenance of a recordkeeping system that will include Environmental Protection Agency (EPA) notifications, a work control log, inspection results, sampling and analytical data, protective equipment, engineering controls utilized, and waste disposal documentation and/or documents; and

4.2.7 **SED** staff members with the requisite asbestos training and certification will be assigned on a rotating basis to be "on-call" during non-duty hours for asbestos emergencies.

4.3 **Facility Officer:**

4.3.1 The Facility Officer shall be responsible (if during the performance of assigned duties discovers ACM) for identifying incidents of noncompliance with this program and coordinating corrective action with the **AOC Asbestos Management Coordinators** and/or the relevant **Jurisdiction Asbestos Management Coordinators.**

4.3.2 *The Facility Officer has the authority to stop any unsafe or unhealthful work practices related to ACM and PACM.*

4.4 **Major Organizational Units:**

4.4.1 This section applies to the following jurisdictions and individual positions:

(a) U.S. Capitol Building, Superintendent,

(b) Senate Office Buildings, Superintendent;

(c) House Office Buildings, Superintendent;

(d) Library of Congress, Supervising Engineer;
(e) U.S. Capitol Power Plant, Chief Engineer;
(f) U.S. Supreme Court, Facilities Manager;
(g) U.S. Botanic Garden, Executive Director;
(h) U.S. Capitol Grounds, Landscape Architect;
(i) Construction Management Division, Superintendent of Construction; and
(j) Construction Branch, Construction Manager.

4.4.2 The responsibilities of the leaders of the Major Organizational Units at their respective facilities are:

(a) Appointment and supervision of a **Jurisdiction Asbestos Management Coordinator** who will be responsible for implementation of the AOC UAMP.

(b) Supervision of the implementation of the UAMP, taking into account all areas that are unique to the individual jurisdiction. All unique situations should be documented in writing to the **AOC Asbestos Management Coordinator.**

(c) Establishment of a system to ensure that all individuals under their supervision who manage or perform asbestos-related work have the required training and accreditation as described in **SECTION 6.0.**

(d) Day-to-day, operational responsibility may be passed to the **Jurisdiction Asbestos Management Coordinator.**

4.5 **Jurisdiction Asbestos Management Coordinator:** Responsibilities include:

4.5.1 Implementation of the UAMP. It is the responsibility of this individual to ensure that the procedures described in this program are followed. In areas that are unique to the individual jurisdiction, this coordinator shall develop and apply procedures that deal with special situations. These activities shall be reviewed every six months and updated if necessary.

4.5.2 Initial inspections of <u>all</u> in-place ACM. Noting locations, condition and type of material. All in-place ACM that is found in poor condition shall be placed on a list by priority number (based on the possibility of friability) for corrective action. The status of the corrective actions list shall be updated monthly until all items are completed. Re-inspections of in-place ACM in good condition shall be conducted at least once every 6 months or sooner if deemed necessary by the **Jurisdiction Asbestos Management Coordinator.**

4.6 **Jurisdiction Competent Person:** The individual(s), designated by the **Jurisdiction Asbestos Management Coordinator**, are responsible for identifying existing asbestos hazards in the workplace, selecting the appropriate control strategy, and supervising daily work activities.

NOTE: *The Jurisdiction Competent Person has the authority to stop any unsafe or unhealthful work practices related to ACM and PACM.*

4.7 **Jurisdiction Authorized Person/Worker:** The designated individual(s) are responsible for performing work in regulated areas in accordance with this UAMP.

4.8 **Jurisdiction "Operations and Maintenance" Person(s):** The designated individual(s) are responsible for conducting work practices, in accordance with this UAMP, that maintain ACM in good condition, ensure clean-up of previously released asbestos fibers, and prevent further release by minimizing and controlling ACM disturbance and damage.

4.9 **AOC Employees:** AOC employees are responsible for reporting to the **AOC Asbestos Management Coordinator** or the relevant **Jurisdiction Asbestos Management Coordinator** any damaged, delaminated or exposed material suspected to contain asbestos, which they have observed.

SECTION 5.0 --- TECHNICAL/COMPLIANCE REFERENCES and RESOURCES

Refer to **APPENDIX W.**

SECTION 6.0 --- MANDATORY TRAINING and ACCREDITATION

6.1 **Background:** All persons managing or performing asbestos-related work in facilities under the jurisdiction of the AOC shall complete the following types of training, based on their assigned responsibilities. Training and accreditation requirements are in accordance with 40 CFR 763, EPA's Model Accreditation Plan, and 29 CFR 1926.1101 (OSHA). **No person may conduct any asbestos-related activities until the appropriate training and accreditation are received.**

6.2 **AOC Asbestos Management Coordinator:** The Coordinator shall complete the following training:

- 6.2.1 Inspector
- 6.2.2 Project Designer
- 6.2.3 Supervisor/Competent Person
- 6.2.4 NIOSH 582 Course, Airborne Asbestos Sampling and Evaluation Techniques (Using Phase Contrast Microscopy).

6.3 **SED Inspector:** The Inspector shall complete the following training:

- 6.3.1 Inspector
- 6.3.2 Project Designer
- 6.3.3 Supervisor/Competent Person
- 6.3.4 NIOSH 582 Course, Airborne Asbestos Sampling and Evaluation Techniques (Using Phase Contrast Microscopy).

6.4 **Jurisdiction Asbestos Management Coordinator:** The Coordinator shall complete the following training:

- 6.4.1 Inspector
- 6.4.2 Project Designer
- 6.4.3 Supervisor/Competent Person

6.5 **Jurisdiction Competent Person:** The Competent Person shall complete the following training:

- 6.5.1 Inspector
- 6.5.2 Project Designer
- 6.5.3 Supervisor/Competent Person

6.6 **Jurisdiction Authorized Persons/Workers:** The Persons/Workers shall complete the following training: Worker.

6.7 **Jurisdiction Operation and Maintenance Person:** These persons shall complete the following training: Operations & Maintenance Practices.

SECTION 7.0 --- MEDICAL SURVEILLANCE PHYSICALS

7.1 **Coverage:** Individuals appointed to complete the following assignments shall be required to have medical surveillance physicals as required by 29 CFR 1926.1101 (m) and the AOC Medical Surveillance Physical Program:

- 7.1.1 AOC Asbestos Management Coordinator
- 7.1.2 SED Inspectors
- 7.1.3 Jurisdiction Asbestos Management Coordinator
- 7.1.4 Jurisdiction Competent Persons
- 7.1.5 Jurisdiction Authorized Persons/Workers
- 7.1.6 Jurisdiction Operation & Maintenance Persons: for employees performing Class I, Class II, and Class III (O&M) work --- where employees for a combined total of 30 days per year engage in OSHA defined Class I, Class II and Class III work OR those employees who can be exposed at or above the PEL or excursion limit --- while wearing a negative pressure respirator (no time limit).

7.2 **Physical Protocols:** It shall be the responsibility of first-line supervisors to make certain that each employee listed immediately above shall receive an asbestos and respiratory physical prior to beginning work with ACM and annually thereafter. The employer shall provide to the physician information about the type of respiratory protection that will be used. The protocols for physicals includes the following criteria:

7.2.1 Asbestos: the protocol shall include work and medical history on the OSHA Pr -Medical form (or utilizing a more-detailed form tailored for the situation). It also includes a physical examination directed at the pulmonary and gastrointestinal systems, including a chest roentgenogram to be administered at the discretion of an Occupational Physician, and pulmonary function tests of forced vital capacity (FVC) and force expiratory volume at one second (FEV[1]).

7.2.2 Respirator: the protocol shall be based upon the type of respiratory protection being used, and the degree of work activity. Use of negative pressure, SCBA, full or half-mask respirators, and those involved in moderate to heavy work assignments shall need a physical examination.

7.2.3 Capabilities: Workers who must wear a respirator, shall be physically capable of working with the respirator, regardless of the type, amount, and/or severity of the work undertaken.

7.3 **Other Details:**

7.3.1 Newly hired personnel assigned to any of the above-detailed positions shall receive the required physicals within thirty days of employment.

7.3.2 For the purpose of "closure," the following personnel shall also receive the same physical as the individuals above in **Section 7.1**, when they:

(a) retire or resign, or
(b) are permanently re-assigned or promoted, or
(c) are terminated, and
(d) cease to perform asbestos-related work activities.

7.3.3 Not all personnel will consent to this "closure" physical. When this type of physical is offered and not accepted, the denial shall be documented and witnessed.

7.4 These physicals can be arranged by contacting the **Office of the Attending Physician (OAP).**

SECTION 8.0 --- RESPIRATORY PROTECTION PROGRAM

8.1 **Respiratory Protection:**

8.1.1 Each jurisdiction shall provide respirators, and ensure they are used, when required by OSHA 29 CFR 1926.1101(h). Respirators shall be used in the following circumstances ("Classes" further defined in **APPENDIX X**):

(a) During all Class I asbestos assignments.
(b) During all Class II asbestos assignments where the ACM is not removed in a substantially intact state.
(c) During all Class II and III asbestos assignments which are not performed using wet methods.
(d) During all Class II and III asbestos assignments where the jurisdiction does not produce a "negative exposure assessment."
(e) During all Class III asbestos assignments where TSI or surfacing ACM or PACM is being disturbed.
(f) During all Class IV work being performed within a regulated area where other employees performing like or similar work are required to wear respirators.
(g) During all work covered by (OSHA) 29 CFR 1926.1101 where employees are exposed above the TWA or excursion limit.
(h) In emergencies where the possibility of airborne asbestos fibers exists.

8.1.2 Each jurisdiction shall provide a full facepiece, supplied air respirator operated in the pressure demand mode, equipped with an auxiliary positive pressure self contained breathing apparatus for all employees within a regulated area where Class I work is being performed for which a "negative exposure assessment" HAS NOT BEEN PRODUCED.

8.2 **Respirator Program:**

8.2.1 Where respiratory protection is used, each jurisdiction shall institute a respirator program in accordance with 29 CFR 1910.134(b), (d), (e) and (f).

8.2.2 Each jurisdiction shall appoint a **Respirator Program Administrator,** <u>OR</u> vest that interest with the **Jurisdiction Asbestos Management Coordinator.** This administrator shall meet the definition of **"Competent Person"** used in 29 CFR 1926.1101, which describes such individual as "one who is capable of identifying existing asbestos hazards in the work place and who has the authority to take prompt corrective measures to eliminate them." Among the specific duties of the **"Competent Person,"** according to OSHA, is ensuring that employees wear the appropriate personal protective equipment, and are trained in the use of appropriate methods of exposure control. It is necessary to provide this central authority and responsibility to ensure that there are coordination and direction for the program.

8.3 **Respiratory Program Administrators:**

8.3.1 Administrators shall be responsible for:

(a) Purchasing approved respirators for their work force.

(b) Issuing respirators.

(c) Controlling inventory, to include, a system to track identification of users and to compile maintenance records for specific respirators.

8.3.2 And, they shall also be responsible for adapting this program to their unique work force. The following items shall be included:

(a) Written procedures, defined as Written Standing Operating Procedures (SOP's) for selection and use.

(b) Criteria for respirator selection, based upon exposure hazards.

(c) Criteria for training and education, with emphasis on proper use and equipment limitations.

(d) An assignment of individual equipment, for personal use only.

(e) Criteria for respirator cleaning techniques, with emphasis upon cleaning and disinfecting daily after each use, or more frequently --- if needed --- to avoid occupational skin diseases.

(f) Criteria for respirator storage techniques, based upon convenience, cleanliness and sanitary storage conditions.

(g) Procedures for inspection and maintenance, including how to look for defects while cleaning, and how to replace worn parts.

(h) Criteria for work place surveillance, with emphasis on how the **Administrator** shall provide instructions to the employees on how to regularly survey work area conditions for work stress and the use of the proper respirator for the expected exposure level.

(i) Procedures for routine evaluation and reevaluation of the program, to confirm continued effectiveness.

(j) Medical evaluation (see also **SECTION 7.0,** immediately above):

- ♦ to determine if individuals can perform the work and use the respirator.
- ♦ for an annual review of medical status.
- ♦ for a routine respirator fit testing, to determine if the fit test has been conducted and passed; if there is adequate protection for exposure hazards; and for approvals of equipment by MSHA and NIOSH. Time frames are every six months, or if the employee's weight changes by plus-or-minus twenty pounds.
- ♦ Refer to fit-testing requirements and forms in **APPENDIX J, Section J-4.0.**

SECTION 9.0 --- SAMPLING

9.1 This section of the UAMP provides specific details of the following four types of sampling that occur during the application of the UAMP. They are as follows:

9.1.1 Area Air Sampling,
9.1.2 Personal Air Samples,
9.1.3 Final Air Clearances, and
9.1.4 Bulk Sampling.

9.2 Refer to **APPENDIX X.**

SECTION 10.0 --- INSPECTIONS

10.1 **Background:** The vagueness of certain items in existing OSHA and EPA laws governing the management, repair and/or removal of ACM can sometimes be misinterpreted. These misinterpretations are often the result of the lack of experience on the individual's part performing a certain task. Industry standards then come into play that clarify how a procedure is to be followed. These procedures can only be learned through experience on the job rather than solely in a class room environment. This problem is so profound, that private asbestos abatement consultants and asbestos abatement companies establish training programs (that meet EPA training standards) for newly hired Inspectors, (**Competent Persons**) Supervisors and Workers. The new employee then works at that level in a probationary status under the direct supervision of an experienced inspector or supervisor. Usually, the probationary period will last for 3 months or more, so an evaluation can be performed on the new employee's proficiency to inspect or supervise asbestos work, or perform asbestos removal work. If new employees successfully complete the probationary period, they are then allowed to work independently, usually with an increase in responsibility and pay.

10.2 **Direction:** In order for the AOC to operate an effective UAMP, enforcement is essential. The SED must complete compliance inspections --- with qualified inspectors. Additionally, asbestos abatement activities performed by the jurisdictions must be performed by qualified (trained) **Competent Persons/Supervisors** and (trained) abatement workers. When the jurisdictions assign individuals to perform asbestos abatement work (Removal or Operations & Maintenance [O&M]), the individuals need to have a sincere desire to perform these assigned duties within the guidelines of established federal laws, rules, standards and this program. No inspection program can ensure compliance if individuals are not willing to follow the rules.

10.3 **Inspections by SED Inspectors - All Asbestos Work Operations:**

10.3.1 Each **SED Inspector** must be able to demonstrate asbestos abatement field experience either at the "compliance inspector" or "project supervisor" level. In order to take firm control of any asbestos abatement activity, **SED Inspectors** must possess experience, knowledge and skill, which would help the inspector provide the guidance, inspections and documentation to the jurisdictions. These actions should then stand to justify to anyone that the asbestos abatement activity:

(a) was done correctly,
(b) complied with all existing laws and the UAMP, and
(c) done by a third party with an unbiased viewpoint.

10.3.2 The experience level of the **Jurisdiction Competent Person** may require numerous daily inspections by the **SED Inspector** to assure proper compliance with all laws and rules. Newly hired **Jurisdiction Competent Persons** may result in the **SED Inspector** having to do more frequent inspections until the new person is fully aware of the UAMP and its application.

10.3.3 Duties and responsibilities of the **Competent Person** are outlined in 29 CFR 1926.1101(o). The **Competent Person** shall carry out these duties on all classes of asbestos work.

10.3.4 **SED Inspectors** shall document through inspections that the asbestos abatement activity is in compliance with current EPA and OSHA standards. Especially important to note are:

(a) the proficiency of the persons supervising the asbestos abatement activity, and

(b) their level of success during the performance of the required procedures and daily inspections as outlined in 29 CFR 1926.1101(o).

10.3.5 At a minimum, **SED Inspectors** shall perform three UNANNOUNCED compliance inspections a week until the asbestos abatement activity is completed. All EPA and OSHA requirements for asbestos abatement activities shall be addressed in each inspection. At the end of each inspection report, with the cooperation of the appropriate **Competent Person**, the **SED Inspectors** shall certify that the asbestos abatement activity is in compliance with all EPA and OSHA standards governing asbestos abatement along with the requirements established in this program, or indicate items not in compliance, and corrective actions taken.

10.3.6 The results of these inspections shall be made available to the **AOC Asbestos Management Coordinator** by the next duty day, then forwarded through the DOE, to the jurisdiction for filing.

10.4 Inspections by the Jurisdiction Asbestos Management Coordinator, and /or Competent Person/Supervisor:

10.4.1 The **Jurisdiction Asbestos Management Coordinator** shall ensure that the **Competent Person/Supervisor**, supervises and performs required inspections outlined in 29 CFR 1926/1101 (o) for all classes of asbestos work operations.

10.4.2 The **Jurisdiction Competent Person/Supervisor** shall perform required inspections as outlined in 29 CFR 1926. 1101(o). These inspections are:

(a) For class I work operations, on-site inspections shall be made once during each work shift or anytime an employee requests one, or at increased intervals as directed by the **SED Inspector.**

(b) For all other class work operations, on-site inspections shall be made: at intervals sufficient to determine whether conditions have changed; at any reasonable time when an employee requests; or at increased intervals as directed by the **SED Inspector.**

(c) The items to be inspected are listed on the sample inspection forms displayed in **APPENDIX J.**

10.5 Inspections of In-place PACM and ACM; in Buildings Under the Jurisdiction of the AOC:

10.5.1 29 CFR 1926.1001 and 1101 require building owners to identify, record and maintain records indicating the location, quantity and condition of PACM and ACM within their buildings.

10.5.2 Once identified, warning labels shall be affixed to all ACM materials, mixtures, scrap, waste, debris and other products containing asbestos, or to their containers. Each jurisdiction shall ensure that all personnel comprehend the warning label by means of the use of foreign languages, pictographs, graphics, etc. These warning labels shall comply with the requirements of 29 CFR 1910.1200(f), OSHA's Hazard Communication Standard and shall contain information provided in paragraph (k)(7)(iii) of 29 CFR 1926.1101.

10.5.3 For information concerning the inspection process, refer to **APPENDIX A.**

SECTION 11.0 --- ASBESTOS MANAGEMENT PROCEDURES

11.1 Initial Field Inspections: OSHA 29 CFR 1910.1001: The General Industry Standard for asbestos states in paragraph (j) that building owners and/or facilities managers of public and commercial buildings have the duty of communicating to their employees and other employers of potentially exposed employees, that the facilities they work in contains asbestos materials. OSHA assigns specific information conveying and retention duties that requires the building owners and/or facilities managers to exercise due diligence in complying with the requirement to inform their employees and employers of employees about the presence and location of ACM within their buildings. Refer also to **APPENDIX A.**

11.2 AOC Mandatory Notification: 40 CFR Part 61, Subpart M, (EPA) National Emission Standard for Asbestos (NESHAP), requires the EPA be notified when a specified amount of ACM is removed. Refer to **APPENDIX B.**

11.3 Emergencies:

11.3.1 *The following definition of a disturbance of PACM or ACM is more restrictive than the regulations stated in the EPA and OSHA standards. The emergency procedure for correcting a disturbance was developed in order to comply with THE ARCHITECT OF THE CAPITOL's order to establish limits equal to, or more stringent than, existing federal laws, rules and standards governing asbestos work operations.*

11.3.2 OSHA 29 CFR 1926.1101, (b) (Definitions); defines a disturbance as contact which releases fibers from ACM or PACM or debris containing ACM or PACM. This term includes activity that disrupts the matrix of ACM or PACM, renders ACM or PACM friable, or generates visible debris. Disturbance includes cutting away small amounts of ACM and PACM, no greater than the amount which can be contained in <u>one</u> standard sized glove bag or waste bag in order to access a building component. In no event shall the amount of ACM or PACM so disturbed exceed that which can be contained in <u>one</u> glove bag or waste bag which shall <u>not</u> exceed 60 inches in length and width.

11.3.3 It is the policy of the AOC that a disturbance is contact which releases fibers from ACM or PACM or debris containing ACM or PACM. This term includes activities that disrupts the matrix of ACM or PACM, render ACM or PACM friable, or generate visible debris.

11.3.4 The basic steps/goals involved in responding to an emergency are as follows:

(a) isolate the area;
(b) identify the source;
(c) clean-up the situation as soon as possible, and
(d) collect air samples to document acceptable airborne levels.

11.3.5 For further information, refer to **APPENDIX C.**

11.4 Glove Bag Removal Operation (Class I, II, III [O&M] work): *The following glove bag procedures exceed the established EPA and OSHA standards. Criteria were developed in order to comply as noted in Paragraph 11.3.1 above.* Refer to **APPENDIX D.**

11.5 Containment (Abatement) Project Operations (All Class I and II Work): *The following containment operation procedures exceed the established EPA and OSHA standards. Criteria were developed in order to comply as noted in Paragraph 11.3.1 above.* Refer to **APPENDIX E.**

11.6 Removal of Asbestos Containing Floor Tile: Refer to **APPENDIX F.**

11.7 Removal of Asbestos Containing Transite Panels: The removal of transite panels is considered Class II work as defined in 29 CFR 1926.1101. This being the case, a **Competent Person** shall supervise the operation. Refer to **APPENDIX G.**

11.8 Repair - Operations and Maintenance (O&M) of ACM: When ACM is found in a building, a O&M program shall be implemented as soon as possible. Refer to **APPENDIX H.**

11.9 Asbestos Waste Disposal: Disposal of waste asbestos and other products associated with the abatement and control of ACM shall be disposed of properly. Refer to **APPENDIX I.**

SECTION 12.0 --- RECORDKEEPING:

12.1 In order to document any asbestos work operation, the following forms have been developed. The individual that is responsible for filling out the form is indicated at the beginning of each form page.

12.2 Required Records and Forms:

- **12.2.1** Pre-Commencement Inspection
- **12.2.2** Competent Person's Daily Log
- **12.2.3** Daily Personnel List
- **12.2.4** Respirator Fit Test
- **12.2.5** Asbestos Removal Inspection
- **12.2.6** Incident Report
- **12.2.7** Visual Inspection
- **12.2.8** Final Air Sampling
- **12.2.9** Authorization For Containment Removal
- **12.2.10** Final Inspection
- **12.2.11** Personal Air Sampling
- **12.2.12** Negative Exposure Assessment
- **12.2.13** EPA Accreditation
- **12.2.14** Medical
- **12.2.15** NESHAP NOTIFICATION
- **12.2.16** Glove Bag

12.3 Forms, and Directions on How to Use Them: Refer to **APPENDIX J.**

SECTION 13.0 --- TESTING OF HEPA-FILTERED EQUIPMENT

Refer to **APPENDIX V.**

APPENDIX A ----
INITIAL FIELD INSPECTIONS

A-1.0 INSPECTIONS: To comply with the OSHA requirement, initial inspections of in-place ACM shall be conducted, with follow-up inspections every six months. Information from these inspections shall include the location and condition of the ACM. A master list that contains th. locations of ACM in the buildings shall be maintained by each jurisdiction.

A-2.0 EMPLOYEES: All AOC employees, other employers of employees, and any other entity that could possibility come in contact with the ACM shall be notified of asbestos locations within the facilities.

A-3.0 PRIORITY REPAIR LIST: Additionally, ACM in bad condition that requires repairing, shall be placed on a priority repair list. Actions shall immediately be taken to repair ACM in bad condition. OSHA does not require the removal of all ACM within buildings that is in good condition. However, the AOC does require that repairs to ACM in bad condition be done properly and in accordance with all regulations.

A-4.0 GUIDANCE: The following guidance is given regarding inspection of in-place ACM:

A-4.1 An assessment of the condition shall evaluate the quality of the installation, the adhesion of the friable material to the underlying substrate, deterioration, and damage from vandalism or any other cause. Evidence of debris on horizontal surfaces, hanging material, dislodged chunks, scrapings, indentations, or cracking are indicators of poor material condition.

A-4.2 Accidental or deliberate physical contact with the friable material can result in damage. Inspectors should look for any evidence that the ACM has been disturbed: finger marks in the material, graffiti, pieces dislodged or missing, scrape marks from movable equipment or furniture, or accumulation of the friable material on floors, shelves, or other horizontal surfaces.

A-4.3 ACM may deteriorate as a result of either the quality of the installation or environmental factors which affect the cohesive strength of the ACM or the strength of the adhesion to the substrate. Deterioration can result in the accumulation of dust on the surface of the ACM, delamination of the material (i.e., separating into layers), or an adhesive failure of the material where it pulls away from the substrate and either hangs loosely or falls to the floor and exposes the substrate. Inspectors should touch the ACM and determine if dust is released when the material is lightly brushed or rubbed.

A-4.4 If the coated surface "gives" when slight hand pressure is applied or the material moves up and down with light pushing, the ACM is no longer tightly bonded to its substrate.

A-5.0 WATER DAMAGE:

A-5.1 Water damage is usually caused by roof leaks, interior gutter drain lines, particularly in buildings with flat roofs or a concrete slab and steel beam construction. Skylights can also be significant sources of leaks. Water damage can also result from plumbing leaks and or high humidity in the vicinity of pools, locker rooms, and lavatories.

A-5.2 Water can dislodge, delaminate, or disturb friable ACM that is otherwise in good condition and can increase the potential for fiber release by dissolving and washing out the binders in the material. Materials which were not considered friable may become friable after water has dissolved and leached out the binders. Water can also act as a slurry to carry fibers to other areas where evaporation will leave a collection of fibers that can become suspended in the air.

A-5.3 Inspect the area for visible signs of water damage, such as discoloration of or stains on the ACM; stains on adjacent walls or floors; buckling of the walls or floors; or areas where pieces of the ACM have separated into layers or fallen down, thereby exposing the substrate.

A-5.4 Close inspection is required. In many areas, staining may occur only in a limited area while water damage causing delamination may have occurred in a much larger area. In addition, the water damage may have occurred since the original inspection for friable material, causing new areas to become friable and require a reinspection.

A-5.5 Delamination is particularly a problem in areas where the substrate is a very smooth concrete slab. Check to see if the material "gives" when pressure is applied from underneath.

A-6.0 AIR PLENUM OR DIRECT AIRSTREAM:

A-6.1 An air plenum exists when the return (or, in rare cases, conditioned) air leaves a room or hall through vents in a suspended ceiling and travels at low speed and pressure through the space between the actual ceiling and the suspended ceiling or ducts. The moving air may erode any ACM in the plenum. In evaluating whether an air plenum or direct airstream is present, the inspector must look for evidence of ducts or cavities used to convey air to and from heating or cooling equipment or the presence of air vents or outlets which blow air directly onto friable material.

A-6.2 A typical construction technique is to use the space between a suspended ceiling and the actual ceiling as a return air plenum. In many cases, the tiles in the suspended ceiling must be lifted to check if this is the case. Inspection of the air handling or HVAC equipment rooms may also provide evidence (such as accumulated fibers) of the presence of this material in the plenums.

A-6.3 Special attention should be paid to whether frequent activities (such as maintenance) disturb the material in the plenum. It is also important to check for evidence that the material is being released or eroded (i.e., has it deteriorated or been damaged so that the material is free to circulate in the airstream?).

A-7.0 EXPOSURE, ACCESSIBILITY, AND ACTIVITY:

A-7.1 These three considerations are highly interrelated and have been combined into a single factor. In general, for a site to show a high potential for disturbance, it must be exposed (visible) and accessible, and be located near movement corridors or subject to vibration.

A-7.2 The amount of ACM exposed to the area occupied by people will contribute to the likelihood that the material may be disturbed and determines whether the fibers can freely move through the area. ACM is considered exposed if it can be seen. For a material not to be exposed, a physical barrier must be complete, undamaged, and unlikely to be removed or dislodged. ACM should be considered exposed if it is visible, regardless of the height of the material.

A-7.3 If the ACM is located behind a suspended ceiling with movable tiles, a close inspection must be made of the condition of the suspended ceiling; the likelihood and frequency of access into the suspended ceiling, and whether the suspended ceiling forms a complete barrier or is only partially concealing the material.

A-7.4 ACM above a suspended ceiling is considered exposed if the space above the suspended ceiling is an air plenum. Suspended ceilings with numerous louvers, grids, or other open spaces should be considered exposed.

A-7.5 If friable ACM can be reached by building users or maintenance people, either directly or by impact from objects used in the area, it is accessible and subject to accidental or intentional contact and damage. Material which is accessible is likely to be disturbed in the future.

A-7.6 Height above the floor is one measure of accessibility. However, objects have been observed embedded in ceilings 25 feet or more high. Nearness of the friable ACM to heating, ventilation, lighting and plumbing systems requiring maintenance or repair may increase the material's accessibility.

A-7.7 In addition, the activities and behaviors of persons using the building should be included in the assessment of whether the material is accessible. For example, persons involved in athletic activities may accidentally damage the material on the walls and ceilings of gymnasiums with balls or athletic equipment. To become fully aware of occupants' use of the building, the inspector should consult with building staff or personnel.

A-7.8 When assessing activity levels, consider not only the movement caused by the activities of people, but also movement from other sources such as high vibration from mechanical equipment. Another source of vibration is sound, such as music and noise, which sets airwaves in motion at certain frequencies. As these sound waves impact on ACM, they may vibrate the material and contribute to fiber release. Therefore, more fibers may be released in a music practice room or auditorium than in the rest of the building.

A-7.9 The amount of activity of the occupants can best be described by identifying the purpose of the area as well as estimating the number of persons who enter the area on a typical day.

A-8.0 **PERFORMING THE ACTUAL INSPECTION AND SURVEY:**

A-8.1 To determine if ACM is present in a building, examine construction records and conduct a thorough inspection of building materials. If asbestos is not present, no further action is required. If asbestos is found, however, a control program shall be initiated. In either case, workers and other building occupants will be concerned. Each jurisdiction must be prepared to explain the purpose of the survey, its results, and plans for controlling ACM if it is present.

A-8.2 **SUMMARY:**

A-8.2.1 Planning the Survey: A plan for conducting the ACM survey should include assembling the survey team and gaining cooperation of building occupants. The plan should also include a public information program.

A-8.2.2 Conducting the Survey: The survey consists of checking building records and inspecting the building for evidence of ACM. Specific procedures differ for the three types of ACM, and may include sampling and analysis of suspect materials.

A-8.2.3 The Survey Plan: The survey has four components:

(a) Reviewing building records for references to asbestos used in construction or repairs;

(b) Inspecting materials throughout the building to identify those that may contain asbestos;

(c) Sampling suspect materials for laboratory confirmation that asbestos is present; and

(d) Mapping the locations of all confirmed or suspected ACM.

A-8.2.4 Thorough planning is essential because:

(a) The survey must provide accurate and reliable information;

(b) Questions from building occupants or the public about the survey and about asbestos in general must be answered quickly and responsively;
(c) Complete, accurate, unambiguous documentation of the survey and all test results IS critical; and
(d) When ACM is found, each appropriation must be prepared to initiate special operations and maintenance (O&M) practices immediately, and to develop other controls to minimize health risks.

A-8.3 The importance of a well-planned public communications program cannot be over emphasized. Asbestos is an exceptionally emotional issue. Each Appropriation must clearly understand the purpose of the survey in order to anticipate and address the concerns of building occupants and the public.

A-9.0 **ASSEMBLING THE SURVEY TEAM:**

A-9.1 ***THE ARCHITECT OF THE CAPITOL*** is ultimately responsible for asbestos-related problems in buildings on the Capitol Complex. Each appropriation shall appoint a **Jurisdiction Asbestos Management Coordinator** to direct all day-to-day, asbestos-related activities. This **Coordinator**:

A-9.1.1 Must be able to identify and assess the expertise of the diverse personnel required for an effective team,
A-9.1.2 Shall communicate directly with the building occupants,
A-9.1.3 Oversee the development of the asbestos control program,
A-9.1.4 Will provide information to the public,
A-9.1.5 Needs to become familiar with the use of ACM in buildings, the potential for building contamination by airborne asbestos, the health risks to building occupants, and options for controlling ACM, and
A-9.1.6 Needs a general understanding of all the related issues in order to review technical tasks and judge whether they are being performed properly.

A-9.2 This **Coordinator's** responsibilities include:
A-9.2.1 Implementing a training program for the ACM survey if the survey is to be conducted in-house,
A-9.2.2 Selecting a technical advisor to conduct the ACM survey,
A-9.2.3 Selecting a laboratory to analyze samples of material from the building,
A-9.2.4 Designing a system to document all information about asbestos in the buildings, and
A-9.2.5 Developing a communications package for discussions with building occupants and others.

A-9.3 If ACM is found, the **Jurisdiction Asbestos Management Coordinator** shall also be prepared to initiate special operations and maintenance (O&M) practices, assess the need for other control measures, and oversee abatement projects if additional corrective action is necessary. The duties and responsibilities of this **Coordinator** continue until all ACM is removed from the building.

A-9.4 An **Asbestos Survey Team** shall be assembled under the direction of this **Coordinator**. Building maintenance leaders are obvious choices due to their knowledge of building records and facilities. Maintenance and engineering staffs may also be team members since they likely will conduct the survey.

A-9.5 **Obtaining Cooperation:** Cooperation must be obtained from building maintenance, operations, and planning personnel. A survey for ACM can disrupt normal building activities. Occupants will be concerned and

curious. The survey team must be prepared to discuss the purpose of the survey in a way that is realistic, yet does not cause undue anxiety. Questions requiring a lengthy response should be referred to the **Jurisdiction Asbestos Management Coordinator.**

A-9.6 Conducting the Survey: The survey involves a review of building records and an inspection of the building for friable materials. The inspection is the more important component of the survey, since building records are often incomplete and unreliable. Whenever the presence of asbestos is in doubt, prudence is recommended: treat the material as if it contains asbestos.

A-9.7 General Survey Elements: Begin by reviewing building records to see if ACM was specified at any stage. Although building records are often unreliable, they are a useful starting point. Check the original plans, shop drawings, remodeling records, and work change orders. If any of these items appears in the records, assume that asbestos is in the building. Identify ACM mentioned in building records by type:

A-9.7.1 Troweled or sprayed on surfacing material,
A-9.7.2 Pipe and boiler insulation, or
A-9.7.3 Other miscellaneous ACM.

A-9.8 Next, inspect the building for ACM identified in the building records. Determine if the materials are friable and record the findings. They may be sampled and analyzed to confirm the presence of asbestos. Thoroughly inspect all areas of the building for friable materials and sample them. The specific procedures for inspection and sampling vary depending on which of the three types of material are involved. The sampler of building materials should wear a respirator to prevent inhalation of fibers.

A-9.9 Procedures for Sprayed or Troweled-on Surfacing Materials PACM - ACM: Surfacing materials can be friable or nonfriable. Friable forms are either very fibrous and fluffy (sometimes like cotton candy) or granular and cementitious. Since friable materials are more likely than nonfriable materials to release fibers when disturbed, the first priority is to identify those friable surfacing materials that contain asbestos. The first step is to locate ACM specified in building records and determine its friability. Then, identify all friable surfacing materials in the building and take samples to be analyzed for asbestos.

A-9.10 Surfacing Materials Identified as ACM in Building Records: Begin by locating any acoustical plaster or other surfacing materials that, according to building records, contain asbestos. Rub these materials to see if they crumble or produce a light powder. If so, consider them friable. *Note: When disturbing material that may contain asbestos, the inspector should wear protective equipment.* Either assume that these materials contain asbestos, or sample and analyze them, as discussed below. Record the location and degree of friability.

A-9.11 Other Surfacing Materials That May Contain Asbestos: Conduct a thorough building inspection for friable materials on walls, ceilings, beams, ducts, and any other surface. Rub the material to see if it is friable. Group any friable material into "homogeneous" areas for further study. A homogeneous area contains friable material that seems by texture and color to be uniform. If materials appearing uniform were installed at different times, designate the two materials as distinct homogeneous areas.

A-9.12 Once homogeneous areas of friable materials have been delineated and recorded on floor plans, collect samples of the materials and send them to a qualified laboratory. Sampling and analysis should be conducted according to the following guidelines:

A-9.12.1 Appoint a coordinator to oversee the entire sampling and analysis operation and quality assurance program. The **Jurisdiction Asbestos Management Coordinator** should assume this role.

A-9.12.2 Choose a qualified laboratory to analyze the samples. The approved method of bulk sample analysis for asbestos is polarized light microscopy (PLM).

A-9.12.3 Collect at least three core samples of material in each homogeneous sampling area. Select sampling locations that are representative of the homogeneous area. *Note: Either select locations evenly distributed throughout the area, or choose the locations by a random selection method. It is important that three samples not be collected in the same location.* Remember that everyone taking samples should wear a respirator.

A-9.12.4 Collect at least 1 quality control (QC) sample per building or 1 QC sample per 20 samples, whichever is larger. A QC sample is taken from the area abutting a regular sample. (The two samples are referred to as "side-by-side samples.") **The QC sample should be analyzed at a second laboratory to confirm the results of the primary laboratory.**

A-9.12.5 Label all samples with an identifying code and keep a code log. To avoid bias, the laboratory analyst should not know the origin of the samples.

A-9.12.6 Asbestos is present if the material analyzed is more than one percent asbestos by weight.

A-9.12.7 Record the results of the sampling and analysis program and save the records indefinitely. If no asbestos is found in these materials, no further action is necessary for this category of ACM. If asbestos is present, then an asbestos control program should be developed.

A-9.13 Procedures for Pipe and Boiler Insulation (TSI) PACM - ACM: Asbestos-containing insulation is found on equipment containing hot air or liquid-pipes, boilers, tanks, and sometimes ducts. These insulation materials may be a chalky mixture of magnesia and asbestos, preformed fibrous asbestos wrapping, asbestos fiber felt, corrugated paper, or insulating cement. In most cases, the insulating material is covered with a protective jacket of cloth, tape, paper, metal, or cement. Boiler insulation may consist of thermal bricks (refractory) or asbestos insulating blanket, and is usually covered with finishing cement. Occasionally, asbestos millboard is used as a stiff outside covering on removable boiler insulation.

A-9.13.1 Start in the boiler room and follow air and water distribution systems throughout the building. Building plans should indicate the location of pipes and ducts.

A-9.13.2 If the insulation is in good condition, leave it undisturbed. Sampling is not recommended in this case: instead, assume that the insulation contains asbestos. An EPA nationwide survey of federal, residential, and commercial buildings revealed that approximately 16 percent (20 percent of those constructed before 1970) contained asbestos pipe or boiler insulation. An exception to this rule is yellow or pink wrapped insulation. The color is usually a clear indication of fibrous glass rather than asbestos material. Even here, however, pipe elbows and joints will likely contain asbestos.

A-9.13.3 Sample the insulation materials from the damaged or exposed ends or other parts. Procedures for sampling and analyzing insulation materials are similar to those for surfacing materials:

(a) Identify homogeneous areas (i.e., sections of insulation that appear uniform in color and texture).

(b) Take samples for each homogeneous area where the insulation is damaged or exposed. Remember, all persons taking samples should wear a respirator.

(c) Submit samples to a qualified laboratory for analysis.

A-9.14 The presence (assumed or confirmed) or absence (confirmed) of asbestos should be documented in permanent records. If asbestos is present, an asbestos control program should be implemented. If the presence of asbestos has been assumed, sampling and analysis may be useful for confirmation before any additional corrective action is taken.

A-9.15 Procedures for Other ACM: Most ACM in this category (e.g., wallboard, ceiling tile, floor tile) is hard and nonfriable, and sampling would damage it and release fibers needlessly. Information on asbestos in these materials comes mainly from building records or building personnel. Document the presence and location of these materials in permanent records. *NOTE: Asphalt and vinyl flooring material installed no later than 1980, is to be considered to contain asbestos unless sampling of such flooring material indicates no asbestos present.*

APPENDIX B ----
MANDATORY ASBESTOS
NOTIFICATION REQUIREMENTS

B-1.0 **BACKGROUND**

B-1.1 REFERENCE: Architect of the Capitol Memo, dated December 13, 1994.

B-1.2 SUBJECT: Mandatory Asbestos Notification Policy.

B-1.3 On this date and in order to comply with the requirements of the Clean Air Act, which the General Counsel's Office has determined applies to the Architect of the Capitol, a notification policy was established. The referenced Memo outlined notification procedures to follow prior to the commencement of any asbestos removal operation. Each appropriation under the Architect of the Capitol's jurisdiction, is required to notify the Environmental Protection Agency (EPA) and the District of Columbia.

B-1.4 As a part of the Clean Air Act, the National Emission Standards for Hazardous Air Pollutants; Asbestos (NESHAP) was developed. The NESHAP rule, outlines notification requirements that apply to building owners (see the EPA NESHAP Notification, i.e., *NOTIFICATION OF DEMOLITION AND RENOVATION* form attached). In general, a building owner must, prior to the commencement of any demolition or renovation operation, thoroughly inspect the affected facility or part of the facility where the renovation or demolition operation will occur for the presence of all types of asbestos.

B-2.0 **TYPES OF NOTIFICATIONS:**

B-2.1 Notification of Scheduled Operations (40 CFR Part 61.145, a, 4):

B-2.1.1 In a facility being renovated, an EPA NESHAP Notification is required if the combined amounts of Regulated Asbestos Containing Material (RACM) being stripped, removed, dislodged, cut, drilled, or similarly disturbed is at least:

(a) 80 linear meters (260 linear feet) on pipes, or
(b) 15 square meters (160 square feet) on other facility components, or
(c) 1 cubic meter (35 cubic feet) off components where the length or area could not be measured previously.

B-2.1.2 In a facility being renovated, a DISTRICT OF COLUMBIA Notification is required using the same form that is used to notify EPA, if the combined amounts of RACM being stripped, removed, dislodged, cut, drilled, or similarly disturbed is at least:

(a) 30 linear feet, or
(b) 18 square feet.

B-2.2 Notification of Nonscheduled Operations (Ref. 40 CFR Part 61.145 a 4 iii): During individual nonscheduled renovation operations, a EPA NESHAP notification is required, if the amounts of RACM predicted to be removed or stripped during a calendar year (January 1 through December 31) is at least:

B-2.2.1 80 linear meters (260 linear feet) on pipes, or
B-2.2.2 15 square meters (160 square feet) on other facility components, or
B-2.2.3 1 cubic meter (35 cubic feet) off components where the length or area could not be measured previously.

B-2.3 Notification of Emergency Renovation Operation (Ref. 40 CFR Part 61.145 a, 4, iv): A EPA NESHAP Notification of Emergency Renovation Operation is required when as a result of a sudden, unexpected event that necessitated the renovation, the combined amounts of RACM to be removed or stripped exceed the combined amounts that requires a Notification of Scheduled Operation.

B-2.4 Revised Notification to any of the above notifications: A revised notification shall be submitted by the **Competent Person** listed on the original notification form if there is a change to:

B-2.4.1 The start date. This revised notification shall be received by EPA prior to the original start date but not less than 10 working days prior to the new scheduled start date.

B-2.4.2 When the estimated waste asbestos amounts vary by 20% or more. This revised notification shall be forwarded to EPA as soon as new amounts are known but not later that the scheduled completion date.

B-3.0 PROCEDURES: Prior to the undertaking of any asbestos work, the following actions shall be undertaken:

B-3.1 For Scheduled Operations (40 CFR Part 61.145, a, 4):

B-3.1.1 Contact the Safety Engineering Division (**SED**) fifteen days prior to all asbestos work -- to receive and AOC Asbestos Project Control Number, and to begin the notification process that the **SED** is tasked with. During the first few days the following will occur:

(a) An inspection of the anticipated job or project shall be completed. This inspection will be performed by the assigned **Competent Person** who has current "Supervisor/ Contractor" accreditation as outlined under EPA's Model Accreditation Plan within the AHERA regulation, and who will supervise the asbestos removal operation. As part of the training received in obtaining the above accreditation, a person who has "Supervisor/ Contractor" accreditation has been trained and tested in completing the EPA NESHAP Notification, *NOTIFICATION OF DEMOLITION AND RENOVATION*.

(b) The responsible Superintendent, Supervising Engineer or Facility Manager shall sign blocks XVII and XVIII on the completed *NOTIFICATION OF DEMOLITION AND RENOVATION* form and forward it to the **SED** (**NOTE**: Regardless of the amount of asbestos being removed, a signed form shall be submitted for the project/job to the **SED** immediately after the inspection.) An electronic copy of the form is available, see **APPENDIX Y**.

B-3.1.2 The **SED** shall determine if the quantity of asbestos being removed necessitates the formal submission of the *NOTIFICATION OF DEMOLITION AND RENOVATION* form to the EPA Region III NESHAPS coordinator and District of Columbia. If amounts of asbestos being removed require the submission of the original *NOTIFICATION OF DEMOLITION AND RENOVATION* form to the EPA Region III NESHAPS coordinator and District of Columbia, it shall be mailed first class U.S. mail so to arrive at those locations 10 days prior to the stated start date.

B-3.2 Nonscheduled Operations (Ref. 40 CFR Part 61.145 a 4 iii):

B-3.2.1 Contact the **SED** twenty days prior to December 31 in the current calendar year to receive an Asbestos Project Control Number for each building under the appropriation's control that has asbestos containing material, and to begin the notification process that the **SED** is tasked with.

B-3-2.2 During the first few days the following will occur: The appropriation's assigned **Competent Person** who has current "Supervisor/ Contractor" accreditation as outlined under the Model Accreditation Plan within the AHERA regulation, shall predict the combined additive amount of RACM to be removed or stripped during the next calendar year (January 1 through December 31) for each building that is under the appropriation's control. As part of the training received in obtaining the above accreditation, a person who has "Supervisor/Contractor" accreditation has been trained and tested in completing the NESHAP notification form. The responsible Superintendent, Supervising Engineer or Facility Manager shall sign blocks XVII and XVIII.

B-3.2.3 The completed and approved *NOTIFICATION OF DEMOLITION AND RENOVATION* form is then submitted to the **SED** fifteen days prior to December 31 (**NOTE:** Regardless of the amount of predicted combined additive amount of RACM to be removed or stripped during the next calendar year being removed, an approved form shall be submitted to the **SED**). An electronic form is available, see **APPENDIX Y.**

B-3.2.4 The **SED** shall determine if the predicted combined additive amount of RACM to be removed or stripped during the next calendar year necessitates the formal submission of the *NOTIFICATION OF DEMOLITION AND RENOVATION* form to the EPA Region III NESHAPS coordinator and District of Columbia. If predicted combined additive amounts of RACM to be removed or stripped during the next calendar year require the submission of the original *NOTIFICATION OF DEMOLITION AND RENOVATION* form to the EPA Region III NESHAPS coordinator and District of Columbia, it shall be mailed first class U.S. mail so to arrive at those locations 10 days prior to December 31.

B-3.3 Notification of Emergency Renovation Operation (Ref. 40 CFR Part 61.145 a 4 iv):

B-3.3.1 An EPA NESHAP Notification of Emergency Renovation Operation is required when as a result of a sudden, unexpected event that necessitated the renovation, the combined amounts of RACM to be removed or stripped exceed the combined amounts that requires a Notification of Scheduled Operation.

B-3.3.2 The Director of Engineering shall be the sole determinant of what is, and what is not, an emergency. In emergency situations, the notification process shall be made as soon as possible following the above procedure. The Director of Engineering shall sign blocks XVII and XVIII on the notification form.

B-3.4 Revised Notification to any of the above notifications (40 CFR Part 61.145 b 1 iv):

B-3.4.1 The **Competent Person** shall submit a revised notification to the **SED** if there is a change to:

(a) Start date. This revised notification shall be received by EPA prior to the original start date. The new start date shall be at least 10 days before asbestos stripping or removal work starts.

(b) Estimated waste asbestos amounts vary by 20% or more. This revised notification shall be forwarded to EPA as soon as new amounts are known but not later that the scheduled completion date.

B-3.4.2 The responsible Superintendent, Supervising Engineer or Facility Manager shall sign blocks XVII and XVIII on the revised notification form.

APPENDIX C ----
EMERGENCIES

C-1.0 **EMERGENCY SITUATIONS:** In an emergency situation meeting the definition in Section 6.3; the **Appropriation Asbestos Management Coordinator** shall follow the following procedures:

C-1.1 **CONTACTS:** Contact the **AOC, Asbestos Management Coordinator** or the "ON CALL" person from the Safety Engineering Division if the disturbance happens during non-duty hours. Both the **AOC, Asbestos Management Coordinator** and the **Appropriation Asbestos Management Coordinator** shall:

C-1.1.1 determine the air sampling requirements,

C-1.1.2 determine the appropriate corrective actions required, and

C-1.1.3 completely document all actions they take until the emergency has been corrected.

C-1.2 **SUSPECT AREA:** The suspect area is to be secured and Non-Aggressive Air Monitoring conducted. If PCM results are below 0.01 f/cc, or TEM results are < 70 s/mm^2; then perform actions in Paragraph 3 below.

C-1.3 **AMOUNT OF ACM DISTURBED:**

C-1.3.1 If the area air samples results are less than those listed in Paragraph 2 above and the amount of ACM that was disturbed created any <u>visible</u> debris, then the disturbed ACM debris shall be misted with amended water and picked up with a wet cloth and disposed of in accordance **APPENDIX I.** The area is then HEPA vacuumed. The building component where the ACM disturbance occurred shall then be encapsulated and repaired.

C-1.3.2 If the area air samples results are greater than those listed in Paragraph 2 above, then the suspect area requires decontamination.

C-1.4 **DECONTAMINATION:** Regardless of the air sample results, however, area decontamination shall be performed if the amount of ACM disturbed is an amount greater than <u>one</u> glove bag or waste bag which shall <u>not</u> exceed 60 inches in length and width.

C-1.5 **AREA DECONTAMINATION:** Area decontamination shall consist of the following actions:

C-1.5.1 Installing Critical Barriers or containment barrier if required,

C-1.5.2 Establishing negative air,

C-1.5.3 Wet clean-up of ACM debris,

C-1.5.4 Wet wipe and HEPA vacuum all area items, walls, floors and critical barriers,

C-1.5.5 Perform visual inspection,

C-1.5.6 Encapsulate area,

C-1.5.7 Perform final air sample(s) to clear area. Once the final air sample(s) result(s) are:

- for PCM results --- less than 0.01 f/cc, <u>or</u>
- for TEM results --- less than 70 s/mm^2, then the area can be re-occupied.

APPENDIX D ----
GLOVE BAG REMOVAL OPERATION

D-1.0 AIR MONITORING: All Class I, II, III glove bag operations shall be conducted within a regulated area, as follows:.

D-1.1 Class I glove bag removal.

D-1.2.1 Class I glove bag removal shall be supervised by a competent person.

D-1.2.2 Class I glove bag operations involving the removal of more than 25 linear feet (lf) or 10 square feet (sf) of thermal system insulation (TSI), where a negative exposure assessment cannot or has not been produced according to OSHA 29 CFR 1926.1101(f)(2)(iii), critical barriers shall be placed over all openings to the area where the glove bag operation is being performed. Once the glove bag operation has been completed, Final PCM air clearances for the area shall be performed.

D-1.2 Class III glove bag removal operations involving the removal of less than 25 lf or 10 sf of thermal system insulation (TSI).

NOTE: For the purpose of this program, the removal of more than 25 lf or 10 sf of thermal system insulation is Class I work.

D-1.2.1 Class III glove bag operations shall be supervised by a competent person.

D-1.2.2 Class III glove bag operations where a negative exposure assessment cannot or has not been produced according to OSHA 29 CFR 1926.1101(f) (2)(iii), or where monitoring results shows the PEL has been exceeded, the area shall be contained by placing critical barriers over all openings, establish negative air (6 air changes per hour) in the area where the glove bag operation is being performed. Once the glove bag operation has been completed, Final PCM air clearances for the area shall be performed.

D-2.0 REMOVE ASBESTOS-CONTAINING MATERIAL INSIDE A GLOVE BAG ACCORDING TO THE FOLLOWING PROCEDURES:

D-2.1 OSHA requires the use of two persons in Class I glove bag operation when removing TSI ACM or PACM, and surfacing ACM or PACM.

D-2.2 Glove bags shall not be used on surfaces whose temperature exceeds 150 degrees Fahrenheit.

D-2.3 Glove bags will be used only once and will not be moved to another location to perform additional removal work, or reused in any way.

D-2.4Glove bags are available in many different sizes, shapes and configurations to accommodate the variety of removal situations that might be encountered. Glove bags are available for use in horizontal, vertical or other special applications.

D-2.5Other types of prefabricated removal enclosures include "glove box" type enclosures, multiple glove bag assemblies, glove bags with self-supporting frames, and glove bags that funnel waste into standard disposal bags.

D-2.6 NOTE: Significant asbestos exposures to workers and others can result from the improper use of glove bags!

D-3.0 ACTIONS TO BE TAKEN IN THE EVENT A GLOVE BAG FALLS: The following actions shall be immediately taken in the event a glove bag falls during a glove bag removal operation:

D-3.1 Wet the effected area and ACM material,

D-3.2 Ensure the area is contained,

D-3.3 Notify the **Appropriation Asbestos Management Coordinator**, and

D-3.4 The **Appropriation Asbestos Management Coordinator** shall initiate EMERGENCY procedures, detailed in **APPENDIX C ---- "EMERGENCIES"**.

D-4.0 **GLOVE BAG REMOVAL STEPS:**

D-4.1 Air monitoring shall be conducted during the glove bag project in accordance with the above air monitoring section for glove bag operations.

D-4.2 Check area where the work will be performed. Place a drop cloth (one layer of 6 mil Poly) on the floor below the item to be glove bagged. If damaged ACM is present (broken lagging, hanging, etc.), wrap in polyethylene and cover polyethylene with strips of duct tape for reinforcement.

D-4.3 Place one layer of duct tape around the removal area where the glove bag will be attached.

D-4.4 Slit the top of the glove bag open (if necessary) and cut down the sides to accommodate the removal area. Place necessary tools into pouch located inside glove bag. Tools needed typically include: scraper, bone saw, utility knife, disposable towels, nylon brush, abrasive pads, wire cutters, tin snips and bridging encapsulate.

D-4.5 If lag cloth is used, cut cloth to sizes needed to cover any ACM that will remain after glove bag work is completed and place inside the glove bag.

D-4.6 Place one strip of duct tape along the edges of the glove bag for reinforcement.

D-4.7 Place the glove bag around the area to be worked on and staple top together through the reinforcing duct tape. Provide 8-12" (200-300 mm) of space inside glove bag between removal surface and glove bag for working room. Seal the plastic edges with duct tape.

D-4.8 Use smoke tube and aspirator bulb to test seal. Place tube into water sleeve (two-inch [50 mm] opening to glove bag) squeezing bulb and filling bag with visible smoke. Remove smoke tube and twist water sleeve closed. While holding the water sleeve tightly, gently squeeze glove bag and look for smoke leaking out, (especially at the top and ends of the glove bag). If leaks are found, tape closed using duct tape and re-test.

D-4.9 Insert wand from garden sprayer with amended water through water sleeve. Duct tape water sleeve tightly around the wand to prevent leakage.

D-4.10 One person places their arms into glove bag sleeves. Remove any metal jacket or covering over the area where removal is required using tin snips and/or wire cutters. Fold in any sharp edges to avoid cutting the bag. Pierce any painted coverings to permit water to soak into the ACM. The other person then wets the material being worked on with amended water and allow to soak in. Cut insulation section to be removed using bone saw or utility knife. Use caution to avoid cutting glove bag. Lift glove bag away from cutting area if necessary. Throughout this process, spray amended water on the cutting area. Remove insulation using scraper or other tools. Place, do not drop removed ACM in bottom of bag.

D-4.11 Rinse all tools with amended water inside the glove bag and place back into pouch. Using nylon brush, scrub pads, disposable towels and amended water, scrub and wipe down the removal area.

D-4.12 Seal exposed ACM around removal area using pre-wetted lag cloth or encapsulate exposed edges with a bridging encapsulant.

D-4.13 After a visual inspection of the removal area by the **Competent Person** has been made, wash down inside of glove bag with amended water. Wipe as necessary to move all debris and residue to the lower part of glove bag (below where bag will be twisted and cut).

D-4.14 Remove water wand from water sleeve and insert wand from garden sprayer with lockdown encapsulate then spray the removal area. Remove the wand from the lockdown encapsulate sprayer, twist water sleeve closed and seal with duct tape.

D-4.15 Put arms back into the sleeves. Place tools inside the sleeve by pulling the sleeve inside-out (keeping the tools inside the sleeve) to create a pouch for the tools. Pull the sleeve away from the bag and twist the sleeve pouch to seal it from rest of bag. Place duct tape over twisted portion and then cut the tool bag from the glove bag, cutting through the twisted/taped section.

D-4.16 Contaminated tools might then be placed directly into another glove bag without cleaning. Alternatively, tool pouch with the tools can be placed in a bucket of water, opened underwater, and tools cleaned and dried. Discard disposable towels and nylon brush with asbestos waste.

D-4.17 Evacuate air from glove bag using HEPA vacuum. With HEPA vacuum operating and removed insulation in the bottom of the bag, twist the bag several times and tape it to keep the material in the bottom during removal of the glove bag from the removal area. Slip a 6 mil (0.15 mm) disposal bag over the glove bag (still attached to removal area). With the hose of an operating HEPA vacuum inserted in the upper part of glove bag, remove tape or cut bag and open the top of the glove bag and fold it down into disposal bag.

D-4.18 The disposable clothing can be removed and placed into the disposal bag.

D-4.19 The exterior of the respirator is wiped with a damp rag. Respirator filters are disposed of as asbestos waste.

D-4.20 Have air samples analyzed.

APPENDIX E ----
CONTAINMENT (Abatement)
PROJECT OPERATIONS (All Class I and II Work)

E-1.0 PREPARATION: Each abatement project operation has unique requirements for effective preparation. The following steps shall be followed for removal of asbestos material by containment method.

E-1.1 SURVEY: The SED Inspector, **Jurisdiction Asbestos Management Coordinator** and the **Competent Person** shall conduct a walk-through survey of the proposed abatement area to:

E-1.1.1 Determine the layout of the containment;

E-1.1.2 Calculate the number of negative air machines required to allow for one air change every 15 minutes (4 per hour) in the work area for areas that are and will remain unoccupied after the abatement action. For areas that are and will remain occupied after the abatement action, one air change every 10 minutes (6 per Hour) is required;

E-1.1.3 Determine the location of the 3 stage airlock system;

E-1.1.4 Determine the locations of the negative air machines. The negative air machines are to be exhausted to the outside of the building unless approved by the SED;

E-1.1.5 After the location of the 3 stage airlock, number of negative air machines required and their location is determined, draw a sketch showing the location of the containment, the 3 stage air lock, the negative air machines and where they are to be exhausted;

E-1.1.6 Determine work methods to be used during the operation; Determine the amount and how the waste is to be stored until transportation is arranged;

E-1.1.7 Determine emergency actions to be taken if during the operation a breech in the containment barrier(s) or a loss of negative air occurs;

E-1.1.8 Review the required mandatory inspections that are performed by the **SED Inspector** and the **Competent Person** during this containment operation.

E-2.0 NOTIFICATION: The **Jurisdiction Asbestos Management Coordinator** shall submit:

E-2.1 The mandatory Form following published notification procedures, and

E-2.2 A copy of the containment layout dawning to the SED.

E-3.0 PROJECT NUMBER: The **Jurisdiction Asbestos Management Coordinator** shall acquire an AOC project number. This number is to be used on all documentation regarding the project.

E-4.0 OPERATIONAL STEPS: The **Jurisdiction Competent Person** shall ensure that each of the following items are completed:

E-4.1 Post warning signs at each entrance to the work area.

E-4.2 Any HVAC system supplying the work area shall be shut down, locked out, and tagged out. Lockout and tagged out all electrical supply.

E-4.3 All vents and air ducts inside the work area shall be individually covered and sealed with two layers of 6 mil polyethylene and duct tape. The first layer shall be left in place until the area has passed visual inspection and air clearance monitoring.

E-4.5 All furniture and other non stationary items in the area shall be cleaned with a HEPA vacuum, wiped with a damp cloth and removed from the area.

E-4.6 Stationary items in the work area shall be HEPA vacuumed and wet cleaned then covered with 2 layers of 6 mil polyethylene and duct taped. The first layer shall be left in place until the area has passed visual inspection and air clearance monitoring.

E-4.7 Pre-clean all surfaces in the work area by HEPA vacuum and wet wiping.

E-4.8 All windows, doorways, elevator openings, skylights and other openings shall be sealed off with polyethylene and duct tape.

E-4.9 Cover the floor in the work area with 2 layers of 6 mil polyethylene. Extend the edges of the polyethylene at least 12" up the sides of the walls. The first layer shall be left in place until the area has passed visual inspection and air clearance monitoring.

E-4.10 Cover the walls with 2 layers of 6 mil polyethylene with duct tape or other means so the polyethylene will not fall. The first layer shall be left in place until the area has passed visual inspection and air clearance monitoring.

E-4.11 Wrap light fixtures with polyethylene.

E-4.12 Build the decontamination unit, (Three Stage Air lock system). A decontamination system is designed to allow passage to and from the work area during removal of operation. A system typically consist of a clean room, shower room, equipment room, and a separate waste load-out area, separated from the work area by airlocks which are formed by overlapping two sheets of polyethylene at the exits of one room, and two sheets at the entrance to the next room. The system can be constructed with lumber, polyethylene, and a portable shower.

E-5.0 CLEAN ROOM: No asbestos contaminated items enters this room. Workers use this area to store street clothing, don protective clothing, and put on respirators on their way into the work area. The clean room is also used to change into street clothing after showering. This room should be furnished with benches, lockers, and a facility for respirators.

E-6.0 SHOWER ROOM: Workers use the shower room as a passage on their way into the equipment room and removal area. On their way out of the contaminated work area, workers are required to shower before entering the clean room. Although not federal mandated, shower water shall be collected and filtered through a system with at least a 0.5 to 1.0 micron particle size collection capability. Shower units will have hot and cold water to encourage workers to use the shower facilities. Shower units normally have a waste water storage box under the unit. These units have electrical pumps to pump out the waste shower water through a filter. Ensure that the pump is on a ground fault interrupter.

E-7.0 EQUIPMENT ROOM: This room is used to store contaminated equipment, hard hats, goggles, gloves, tools during the abatement operation. The equipment room requires several daily cleaning to prevent the asbestos debris from being tracked into the shower and clean room.

E-7.1 Establish negative pressure in the work area. Negative pressure shall be greater than -0.02 inches of static pressure across the enclosure wall. The negative pressure machines shall be exhausted to the outside. Negative pressure will be maintained in the work area 24 hours a day until authorization for containment removal is received.

E-7.2 An inspection of the containment, airlock, and work area is to be performed before any removal of asbestos containing material begins. This inspection shall be performed by a qualified person from the SED and documented using the pre-containment inspection form located in Section XII, "RECORDKEEPING." A copy of this inspection shall be given to the **Competent Person** for the job.

E-8.0 **REMOVAL:**

E-8.1 Ensure that personal protection clothing, equipment, respiratory protection and decontamination procedures are followed. Personal air samples shall be collected at the beginning of the removal operation. These sampling procedures and frequencies can be found in **APPENDIX X.**

E-8.2 All Asbestos material shall be removed in a wet (saturated) state. A wetting agent (surfactant) shall be mixed with the water, wetting the asbestos material before, during and after removal until the material is bagged or drummed up. Usually the wetting agent is mixed at a rate of 1 ounce to 5 gallons of water. Avoid the accumulation of excess water in the work area. This water could leak out to areas outside the containment causing other concerns.

E-8.3 Keep all asbestos material wet until packaged for disposal. Removed material shall not be drop or thrown to the floor. All removed asbestos material shall be packaged up and the work area shall be cleaned by the end of each work shift. No removed asbestos material shall be left unpackaged overnight.

E-8.4 Maintaining high humidity in the work area will aid fiber settling and reduce airborne concentrations of asbestos.

E-8.5 Six mil disposal bags or Fiber drums shall be used for asbestos waste. Large or irregular shaped pieces can be wrapped in 2 layers of 6 mil polyethylene and sealed with duct tape.

E-8.6 Inspect the bags prior to decontaminating for tears. If tears are detected, place the bag inside another bag.

E-8.7 Decontaminate each bag inside the shower room by wet wiping. Place the decontaminated bag inside another bag then move out of the shower room to the storage area. For drums and wrapped items, decontaminate in the shower room area by wet wiping then move to the storage area.

E-9.0 **CLEANING:**

E-9.1 After all the asbestos material has been removed, all surfaces shall be wet brushed and wet cleaned to remove any remaining fibers from the substrate. After the visible residue has been removed, a thin coating of lockdown encapsulate can be applied to the plastic to prevent re-entrainment of fibers.

E-9.2 The outer layer of plastic is then removed from the walls, carefully folding inward to form a bundle, packaged in 6 mil bags for disposal.

E-9.3 The outside of all negative air machines shall be cleaned of all debris. The pre- and box- filters shall also be changed.

E-9.4 All equipment used in the removal operation shall be cleaned. This includes scaffolding, ladders, extension cords, hoses, etc.

E-9.5 The outer layer of plastic is then removed from the floor by first lightly misting and then carefully folding inward to form a bundle, packaged in 6 mil bags for disposal.

E-9.6 The **Competent Person** shall inspect the walls and floor for any visible contamination which may have leaked through the top layer of plastic. Clean those areas as necessary. A complete cleaning of the 3 stage decontamination shall then be completed.

E-10.0 VISUAL INSPECTION: A visual inspection shall be performed of the entire work area. This inspection shall be performed and documented by a qualified person from the SED. Reclean all areas noted during the inspection. A copy of the inspection shall be provided to the **Competent Person** for the job.

E-11.0 ENCAPSULATION:

E-11.1 A sealant shall be applied to the entire work area. This is done to "**lock down**" any invisible fibers which might remain in the pores of the substrate that cannot be removed by scraping or brushing.

E-11.2 After a wait of 24 hours following the application of encapsulate, the last layer of plastic is removed from the walls and packaged in 6 mil bags for disposal. The walls are then HEPA vacuumed and wet cleaned. Remove the last layer of plastic from the floors and HEPA vacuum and wet mop the area.

E-12.0 VISUAL INSPECTION: A qualified person from the SED shall then inspect the area for any residue. If any accumulation is noted, the 24 hour settling period and the cleaning cycle is then repeated.

E-13.0 FINAL AIR SAMPLING: Aggressive final air samples shall then be taken by a qualified person from the SED. The procedures for final air sampling in **APPENDIX X, Section** 3, shall be followed. Results of the final air samples indicating less than 0.01 f/cc (PCM) for the work area is required before the containment can be removed. Once satisfactory results are obtained, a AUTHORIZATION FOR CONTAINMENT REMOVAL will be issued by the SED.

E-14.0 CONTAINMENT REMOVAL: Remove all barriers, three stage air lock system and equipment. A final area inspection shall be performed and documented.

E-15.0 RECORDS: The **Competent Person** is responsible for all record keeping during the containment operation. Copies of these records shall be maintained by the competent person on the job site.

E.15.1 The following is a list indicating what records are required:

E-15.1.1 **Competent Person's** daily Inspections.
E-15.1.2 List of people authorized to enter the work area.
E-15.1.3 List of people, times and dates, entering the work area during the work operation.
E-15.1.4 Evidence of medical clearance, respirator fit test and EPA training certification for all people who enter the work area.
E-15.1.5 All air monitoring results.
E-15.1.6 Copy of the Asbestos Information Report Form that was submitted for this containment operation.
E-15.1.7 Copy of the pre-commencement inspection, visual inspection and authorization for containment teardown.
E-15.1.8 **Competent Person's** daily log.
E-15.1.9 Copies of any compliance inspections.
E-15.1.10 Record of the negative pressure readings.
E-15.1.11 Copies of EPA, OSHA asbestos regulations and the AOC UAMP.
E-15.1.12 Record of the amount of waste removed.
E-15.1.13 Any other documents relevant to the operation.

E-15.2 When the containment operation has been successfully completed, ALL copies of the records shall be forwarded to the SED.

E-16.0 DISPOSAL. Dispose of all bags, drums or packages according to the AOC's UAMP.

APPENDIX F ----
REMOVAL OF ASBESTOS CONTAINING FLOOR TILES

F-1.0 **DIRECTION:** The removal of asbestos containing floor tile is considered Class II work as defined in 29 CFR 1926.1101. This being the case, a competent person shall supervise the operation.

F-1.1 **WORK PRACTICES:** When removing floor tile containing ACM, AOC personnel shall ensure the following work practices are followed:

F-1.1.1 The operation shall be supervised by a competent person as defined by (OSHA) 29 CFR 1926.1101 (b) and the AOC's UAMP.

F-1.1.2 If a negative exposure assessment has not been produced pursuant to 29 CFR 1926.1101 (f)(4)(iii) or where during the job changed and conditions indicate there may be exposure above the PEL or where the material is not removed in a substantially intact state, the following methods shall be used to ensure that asbestos does not migrate from the regulated area:

(a) Place critical barriers over all openings to the regulated area; and

(b) Perform perimeter area air monitoring or air clearance monitoring.

F-1-1.3 The floor tile or its backing shall not be sanded.

F-1.1.4 Vacuums equipped with HEPA filter, disposable dust bags, and metal floor tools shall be used to clean floors.

F-1.1.5 Resilient sheeting shall be removed by wet cutting with snip point cutters. Rip-up of resilient sheet flooring is prohibited.

F-1.1.6 All scraping of residual adhesive and or backing shall be performed using wet methods.

F-1.1.7 Dry sweeping is prohibited.

F-1.1.8 Mechanical chipping is prohibited unless performed in a negative pressure enclosure.

F-1.1.9 Floor tiles shall be removed intact, unless it is demonstrated that intact removal is not possible.

F-1.1.10 When floor tile is removed by heat methods and can be removed intact, wetting may be omitted.

F-1.1.11 Removed floor tile material shall be placed inside:

(a) Cardboard boxes. Card board boxes shall be wrapped with two layers of 6 mil plastic, labeled with danger and owner labels. Care shall be taken to not have boxes over 75 lbs.

(b) Fiber drums. Fiber drums used for floor tile shall be labeled with danger labels and care taken not to have each drum over 75 lbs.

(c) If 6 mil plastic disposal bags are used the, floor tile shall be stacked with edges covered to prevent punching holes in the disposal bag. Normally the 6 mil plastic bags are double bagged, however in this case triple or quadrupled the bags to prevent breakage. Care shall be taken to not have bags over 50 lbs.

F-1.1.15 Dispose bags, drums or packages according to the AOC's UAMP.

F-1.1.16 Complete all documentation.

APPENDIX G ----
REMOVAL OF ASBESTOS
CONTAINING TRANSITE PANELS

G-1.0 BACKGROUND: The removal of transite panels is considered Class II work are defined in 29 CFR 1926.1101. This being the case, a competent person shall supervise the operation.

G-2.0 PROCEDURE: When removing transite panels containing ACM, AOC personnel shall ensure the following work practices are followed:

G-2.1 The operation shall be supervised by a competent person as defined by (OSHA) 29 CFR 1926.1101 (b).

G-2.2 If a negative exposure assessment has not been produced pursuant to 29 CFR 1926.1101 (f)(4)(iii); or where during the job changed and conditions indicate there may be exposure above the PEL; or where the material is not removed in a substantially intact state, one of the following methods shall be used to ensure that asbestos does not migrate from the regulated area:

G-2.2.1 Critical barriers shall be placed over all openings to the regulated area, or

G-2.2.2 Perform perimeter area air monitoring and air clearance monitoring.

G-2.3 Cutting, abrading or breaking transite panels shall be prohibited unless it can be demonstrated that methods less likely to result in asbestos fibers release cannot be used.

G-2.4 Each panel shall be sprayed with amended water prior to removal.

G-2.5 Unwrapped or unbagged panels shall be immediately lowered to the ground and placed in an impervious waste bag or wrapped in plastic sheeting no later than the end of each work shift.

G-2.6 Nails shall be cut with flat, sharp instruments.

G-2.7 Edges of the transite panels shall be covered to prevent tearing the plastic after they are wrapped. The transite panels shall be wrapped with two layers of 6 mil plastic and marked with the appropriate danger labels.

G-2.8 Dispose of the wrapped packages according to the AOC's Uniform Asbestos Management Program.

APPENDIX H ----
REPAIR - OPERATIONS AND MAINTENANCE (O&M) OF ACM

H-1.0 BACKGROUND: When ACM is found in a building, a O&M program shall be implemented as soon as possible. An O&M program is recommended for each type of ACM: surfacing material, pipe, duct and boiler insulation, and miscellaneous materials. Although many of the procedures are the same, certain steps vary according to the type of ACM.

H-2.0 PURPOSE OF A O&M PROGRAM: The program is designed to:

H-2.1 Clean up asbestos fibers previously released,

H-2.2 Prevent future release by minimizing ACM disturbance or damage, and

H-2.3 Monitor the condition of ACM.

The program should continue until all ACM is removed or the building is demolished.

H-3.0 KEY PERSONNEL: The Jurisdiction Asbestos Management Coordinator, building maintenance personnel, and the supervisor of the custodial staff are key participants in the O&M program.

H-4.0 PROGRAM ELEMENTS: The program should alert workers and building occupants to the location of ACM, train custodial and maintenance personnel in proper cleaning and maintenance, implement initial and periodic cleaning using special methods (for surfacing materials, duct and pipe and boiler insulation only), establish a process that assures ACM is not disturbed during building repairs and renovations, and periodically re-inspect areas with ACM.

H-5.0 MAJOR CONCERNS: The discovery of ACM in buildings raises two concerns:

H-5.1 How to clean up asbestos fibers previously released, and

H-5.2 How to avoid ACM disturbance or damage.

The O&M program addresses both of these issues, with procedures tailored to each of the three types of ACM.

H-6.0 WHO SHOULD PARTICIPATE:

H-6.1 The Jurisdiction Asbestos Management Coordinator develops and implements the O&M program. He or she may serve as coordinator or delegate that responsibility to other appropriate employee.

H-6.2 The manager of building maintenance and the custodial staff supervisor are the other key participants. Both must support the program and must generate the same sense of commitment in their staff. A O&M program will increase cleaning and maintenance work; staff dedication is necessary for an effective program.

H-6.3 Trained building inspectors also participate in all O&M programs. These inspectors may be the ones who made the initial inspection for ACM. They may or may not be members of the in-house custodial or maintenance staff. In an O&M program, they will be inspecting the condition and other characteristics of the ACM.

H-7.0 PROGRAM ELEMENTS: Several aspects of a O&M program are the same for all three types of ACM. For clarity and completeness, these steps are repeated in the description of each program.

H-8.0 SPECIAL PRACTICES FOR SPRAYED AND TROWELED-ON SURFACING MATERIALS:

H-8.1 ACM that is sprayed or troweled on ceilings and walls is often the main source of airborne asbestos fibers in the building. Areas covered by ACM tend to be large. If the material is friable, fibers are slowly released as the material ages.

H-8.2 To reduce the level of released fibers and to guard against disturbing or damaging the ACM, the following measures should be taken:

H-8.2.1 Documentation, Education, and Training; the **Jurisdiction Asbestos Management Coordinator** shall:

(a) record the exact location of ACM on building documents (plans, specifications, and drawings).

(b) inform all building occupants and maintenance and custodial workers about the location of ACM and caution them against disturbing or damaging the ACM (e.g., by hanging plants or mobiles from the ceiling, or pushing furniture against walls). Be sure to give this information to new occupants and employees.

(c) require all maintenance and custodial personnel to wear a half-face respirator with disposable cartridge filters or a more substantial respirator during the initial cleaning and whenever they come in contact with ACM.

(d) train custodial workers to clean property and maintenance workers in the performance of their duties to handle ACM safely.

H-8.2.2 Initial Cleaning; custodial staff should:

(a) vacuum carpets with a High Efficiency Particulate Air (HEPA)-filtered vacuum cleaner, but never with a conventional vacuum cleaner. Spray vacuum cleaner bags with water before removal and discard in sealed plastic bags according to EPA regulations for removal and disposal of asbestos. Discard vacuum filters in a similar manner.

(b) HEPA-vacuum all curtains and books. Discard vacuum bags and filters in sealed plastic bags according to EPA regulations for disposal of asbestos waste.

(c) mop all noncarpeted floors with wet mops. Wipe all shelves and other horizontal surfaces with damp cloths. Use a mist spray bottle to keep cloths damp. Discard cloths and mopheads in sealed plastic bags according to the AOC's UAMP for disposal of asbestos waste.

H-2.2.3 Monthly Cleaning; custodial staff should:

(a) spray with water any debris found near surfacing ACM. Report presence of debris immediately to the **Jurisdiction Asbestos Management Coordinator.**

(b) HEPA-vacuum all carpets.

(c) wet-mop all other floors and wipe all other horizontal surfaces with damp cloths.

(d) dispose of all filters, mopheads, and cloths in plastic bags according to EPA regulations for disposal of asbestos waste.

H-2.2.4 Maintenance; the **Jurisdiction Asbestos Management Coordinator** shall ensure that recommended procedures and safety precautions will be followed before authorizing construction and maintenance work involving surfacing ACM. Specifically, containment barriers should be erected around the work area and workers shall wear disposable coveralls as well as respirators. Maintenance staff shall:

(a) clear all construction, renovation, maintenance, or equipment repair work with the **Jurisdiction Asbestos Management Coordinator** in advance.

(b) avoid patching or repairing any damaged surfacing ACM until the ACM has been assessed by the **Jurisdiction Asbestos Management Coordinator.**

(c) mist filters in a central air ventilation system with water from a spray bottle as the filters are removed. Place the filters in plastic bags and dispose of them according to the AOC's Uniform Asbestos Management Program.

H-2.2.5 Periodic Inspection; building inspectors should:

(a) inspect all ACM materials for damage or deterioration at least twice a year and report findings to the

Jurisdiction Asbestos Management Coordinator.
(b) investigate the source of debris found by the custodial staff.

H-2.2.6 Custodial and maintenance staff should:
(a) inform the Jurisdiction Asbestos Management Coordinator when damage to ACM is observed.
(b) An illustrated EPA pamphlet, "Asbestos in Buildings – Guidance for Service and Maintenance Personnel" (USEPA 1985a), may be especially useful in publicizing and initiating the O&M program.

H.2.2.7 The O&M program shall continue until all surfacing ACM is removed. Over time, the O&M program may need to be altered if the ACM is enclosed or encapsulated.

H-9.0 SPECIAL PRACTICES FOR PIPE, DUCT AND BOILER INSULATION:

H-9.1 Asbestos-containing pipe, duct and boiler insulation typically is a less significant source of airborne asbestos fibers than surfacing ACM. Unless damaged, protective jackets around such insulation prevent fiber release.

H-9.2 Thus, the O&M program for pipe, duct and boiler insulation focuses on alerting workers to its location, inspecting the protective jacket, pipe joints or elbows for damage, and taking precautions prior to building construction activities. The program also includes repair and selected special cleaning practices.

H-9.3 Documentation, Education, and Training; the Jurisdiction Asbestos Management Coordinator shall:

H-9.3.1 record the exact location of asbestos-containing insulation on building documents (plans, specifications, and drawings) and document all corrective actions.

H-9.3.2 inform maintenance and custodial workers about the location of asbestos-containing insulation, and caution them about disturbing it.

H-9.3.3 post signs reading, "Caution – Asbestos," on boilers, tanks, pipes, and ducts with asbestos containing insulation.

H-9.3.4 require all maintenance and custodial personnel to wear at least a half-face respirator with disposable HEPA cartridge filters during initial cleaning and whenever they come in contact with asbestos- containing insulation.

H-9.3.5 train custodial workers to clean properly and maintenance workers in the performance of their duties, to handle ACM in accordance with the AOC UAMP.

H-9.4 Initial Cleaning; custodial staff should:

H-9.4.1 clean carpets in rooms containing heating, cooling, air-handling, and similar equipment that has asbestos- containing insulation. Use a HEPA-filtered vacuum cleaner. Discard filters in sealed plastic bags according to the AOC UAMP for removal and disposal of asbestos.

H-9.4.2 wet-mop all other floors in rooms with asbestos-containing insulation. Wipe all shelves and other horizontal surfaces with damp cloths. Use a mist spray bottle to keep cloths damp. Discard cloths and mopheads in sealed plastic bags according to the AOC UAMP for removal and disposal of asbestos.

H-9.4.3 HEPA-vacuum all curtains in rooms with asbestos-containing insulation, and discard vacuum filters in sealed plastic bags according to the AOC UAMP for removal and disposal of asbestos.

H-9.5 Semiannual Cleaning; custodial staff should:

H-9.5.1 spray with water any debris found near asbestos-containing insulation. Report presence of debris immediately to the Jurisdiction Asbestos Management Coordinator.

H-9.5.2 HEPA-vacuum all carpets in rooms with asbestos-

containing insulation.

H-9.5.3 wet-mop all other floors and dust all other horizontal surfaces with damp cloths in rooms with asbestos-containing insulation.

H-9.5.4 seal all debris, vacuum bags, vacuum filters, cloths, and mop heads in plastic bags for disposal according to EPA regulations for asbestos waste.

H-9.6 Maintenance; the **Jurisdiction Asbestos Management Coordinator** shall:

H-9.6.1 ensure that recommended procedures and safety precautions will be followed before authorizing construction and maintenance work involving pipe and boiler insulation. Specifically, containment barriers or glove bags should be positioned around the work area and workers shall wear disposable coveralls and respirators. These procedures are outlined in **APPENDICES D and E.** Insulation damaged during construction and maintenance activities should be repaired with non-asbestos mastic, new protective jackets, and/or replacement insulation.

H-9.6.2 authorize repair of minor insulation damage with non-asbestos mastic, new protective jackets, and/or non-asbestos insulation following recommended repair techniques and precautions.

H-9.6.3 authorize large-scale abatement only after a complete assessment of the asbestos-containing insulation.

H-9.7 The maintenance staff should:

H-9.7.1 clear all construction, renovation, maintenance, or equipment repair work with the **Jurisdiction Asbestos Management Coordinator** in advance.

H-9.7.2 avoid any patching and repair work on insulation until the ACM has been assessed by the **Jurisdiction Asbestos Management Coordinator** and the correct repair procedure has been selected.

H-9.8 Periodic Inspection; building inspectors shall:

H-9.8.1 inspect all insulation for damage or deterioration at least twice a year and report findings to the **Jurisdiction Asbestos Management Coordinator.**

H-9.8.2 investigate the source of debris found by the custodial staff.

H-9.9 Custodial and maintenance staff shall:

H-9.9.1 inform the **Jurisdiction Asbestos Management Coordinator** when damage to the insulation is observed.

H-9.10 The O&M program for Pipe, Duct and Boiler Insulation ACM shall continue until all ACM is removed. The O&M program may need to be altered if the ACM is enclosed or encapsulated.

H-10.0 **SPECIAL PRACTICES FOR OTHER ACM:** Most ACM that is neither surfacing material nor pipe and boiler insulation is hard and nonfriable. This type of ACM releases fibers only when manipulated (e.g., cut, drilled, sawed) or damaged. The O&M program is designed to alert workers to the location of ACM, and to avoid its disturbance or damage.

H-10.1 Documentation, Education, and Training; the **Jurisdiction Asbestos Management Coordinator** shall:

H-10.1.1 record the exact location of these types of ACM on building documents (plans, specifications, and drawings).

H-10.1.2 inform maintenance and custodial workers about the location of ACM and caution them about disturbance or damage.

H-10.1.3 train maintenance workers to handle ACM safely.

H-10.2 Maintenance; the **Jurisdiction Asbestos Management Coordinator** shall:

H-10.2.1 ensure that recommended procedures and safety precautions will be followed before authorizing construction or maintenance work involving ACM.
H-10.2.2 specifically, containment barriers should be erected around the construction and maintenance work area and workers should wear coveralls as well as respirators. All tools should be equipped with HEPA-filtered vacuum devices.

H-10.3 The maintenance staff should:
H-10.3.1 clear all construction, renovation, maintenance, or equipment repair work with the Jurisdiction Asbestos Management Coordinator in advance.
H-10.3.2 avoid removing, sanding, drilling, cutting or stripping floor tiles containing asbestos. If tiles are removed, do not sand asbestos backing material remaining on the floor.

H-10.4 Periodic Inspection; building inspectors shall inspect all ACM for damage or deterioration at least twice a year, and report findings to the Jurisdiction Asbestos Management Coordinator.

H-10.5 Custodial and maintenance staff shall report any ACM damage to the Jurisdiction Asbestos Management Coordinator.

H-10.6 The special O&M program for miscellaneous ACM shall continue until all ACM is removed.

APPENDIX I ----
ASBESTOS WASTE DISPOSAL

I-1.0 PACKAGING AND LABELING WASTE:

I-1.1 Asbestos-containing waste material will be adequately wet in accordance with the NESHAP requirements (40 CFR 61.150). Verify waste packaging and other waste disposal requirements with the SED Inspector that will receive the asbestos waste. Pre-labeled asbestos disposal (6 mil 0.15mm) bags should be used for asbestos waste disposal where possible, appropriate and permissible. Disposal (6 mil 0.15mm) bags should be collapsed by evacuating the air from the bag with a HEPA vacuum in the work area or enclosure. Once collapsed, twist the bag to form a neck and wrap it tight with duct tape. Fold neck of bag over to form a loop, then again wrap duct tape around neck and loop.

I-1.2 Although not a federal regulatory requirement, but which may be required by the landfill being used; asbestos waste is often placed into a second disposal bag and sealed as described above. AOC asbestos projects shall follow this practice. Label disposal bags as required by applicable NESHAP, OSHA and DOT regulations.

I-1.3 Asbestos waste that does not fit into disposal bags will be wrapped leak-tight in two layers of 6 mil (0.15 mm) polyethylene sheet. Each layer should be sealed tightly with duct tape. Label outer layer as required by regulations.

I-1.4 Sharp objects that might puncture polyethylene (such as floor tile) will be placed into cardboard boxes. Each box will be wrapped in two layers of 6 mil (0.15 mm) polyethylene. Boxes should not exceed the size of a standard 6 mil (0.15mm) bag.

I-1.5 All waste will be labeled as required by federal, state and local regulations. Federal regulations requiring labeling of waste include OSHA regulations 29 CFR 1910.1001 and 1926.1101, EPA's NESHAP regulation 40 CFR 61.150, and the Department of Transportation's Hazardous Materials Regulations 49 CFR 171 and 180.

I-1.6 ACM packaging, with some exceptions, must meet general DOT and EPA requirements and be protective, marked and labeled. The OSHA requirements apply regardless of the amount of waste or measured exposure levels (see 29 CFR 1926.1101(l)(2).

I-2.0 LABEL REQUIREMENTS INCLUDE: OSHA 29 CFR 1926.1101(k)(7) requirement:

DANGER CONTAINS ASBESTOS FIBERS AVOID CREATING DUST CANCER AND LUNG DISEASE HAZARD

NESHAP requires that readily visible and legible warning labels as specified by OSHA under 29 CFR 1910.1001(j)(4) or 1926.1101 (k)(7)(i,ii,iii,v,vi,vii) be used on waste containers or wrapped materials (this is the same as the OSHA 29 CFR 1926.1101 label listed above). NESHAP 40 CFR 61.150 (a)(1)(v), and also requires that asbestos containing waste material to be transported off the facility site must also be labeled with owner labels, e.g., the name of the waste generator and the location at which the waste was generated.

I-3.0 WASTE TRANSPORTATION, STORAGE AND DISPOSAL: Transport asbestos waste to a designated storage area or for direct loading onto vehicles/trailers.

I-4.0 PRECAUTIONS: Workers transporting or loading asbestos waste should follow Respiratory Protection Program recommendations concerning respirator requirements for transporting asbestos waste. Do not drag packaged waste. All waste should be lifted and carried, or transported in wheeled carts, when moved from one area to another. Packaged waste should be placed, not thrown or dropped into storage areas. All asbestos waste that is not taken directly to a landfill will be stored in a secure, lockable area. Signage in accordance with NESHAP will be posted at the storage area and on vehicles used to transport asbestos-containing waste material during loading and unloading.

I-5.0 SED INSPECTOR: The SED Inspector shall ensure that a Asbestos Waste shipment record is completed in accordance with the requirements in NESHAP Section 61.150, the disposal site operator/owner and the waste hauler.

APPENDIX J ----
FORMS

J-1.0 PRE-COMMENCEMENT INSPECTION: PRIOR to beginning any removal of asbestos containing material, a pre-commencement inspection shall be performed by a **SED Inspector.** A copy of a signed pre-commencement inspection is to be given to the **Competent Person** at the time a notice to proceed is given. The **Competent Person** shall retain this copy at the work site.

* * PRE-COMMENCEMENT "CONTAINMENT" INSPECTION FORM * *

PROJECT NUMBER: _____ DATE: _____

BUILDING: _____

PROJECT LOCATION: _____

COMPETENT PERSON: _____ PHONE #: _____

CREW SIZE: _____

* * INSPECTED AREAS * *

	SAT	UNSAT.
1. APPROVED LAYOUT ?		
2. EPA/OSHA/AOC-UAMP POSTED ?		
3. ASBESTOS WORKER CERTIFICATIONS ?		
4. SIGNS POSTED ?		
5. ARE THERE SUFFICIENT FIRE EMERGENCY EXITS ?		
6. EVIDENCE OF EACH WORKER MEDICAL EXAM WITHIN LAST YEAR?		
7. **DECONTAMINATION CHAMBER:**		
A. EQUIPMENT ROOM ?		
1. DISPOSAL BIN FOR CONTAMINATED CLOTHING ?		
B. SHOWER ROOM:		
1. SHOWER HEADS / INSIDE CONTROLS ?		
C. CLEAN ROOM:		
1. HANGERS, LOCKERS FOR STREET CLOTHING ?		
E. DEBRIS REMOVAL AIRLOCK:		
F. 2 OR 3 LAYERS OF OVERLAPPING PLASTIC ?		
8. **UTILITIES:**		
A. ELECTRIC SHUTDOWN & LOCK OUT ?		
B. HVAC SHUTDOWN & LOCK OUT ?		

C. ALL OTHER UTILITIES SHUTDOWN ?		
9. **PRE-CLEANING:**		
A. HEPA VACUUM ?		
B. WET WIPING ?		
C. STATIONARY ITEMS IN WORK AREA COVERED AND SEALED ?		
10. **CRITICAL BARRIERS:**		
A. DOORS ?		
B. VENTS / HVAC UNITS ?		
C. WINDOWS ?		
1. SILLS ?		
D. NON - REMOVABLES ?		
E. DRAINS ?		
F. OTHER ?		
G. OTHER ?		
11. **SECONDARY SEALS:**		
A. WALLS (2 LAYERS 6 MIL)		
1. WALL SEAL DROPS OVER FLOOR SEAL ?		
B. FLOORS (2 LAYERS 6 MIL)		
1. TURNED UP WALL AT LEAST 12" ?		
12. **REQUIRED EQUIPMENT**		
A. LIGHTING ?		
B. ELECTRICAL SUPPLY (GFI)		
C. NEGATIVE AIR (HEPA)		
1. VENTED TO EXTERIOR OF BUILDING ?		
2. PROPERLY POSITIONED ?		
3. NUMBER ?		
4. ALLOW _____ AIR CHANGES PER HOUR ?		
5. NEGATIVE PRESSURE DEMONSTRATED ?		
6. NEGATIVE PRESSURE READING_____INCHES OF WATER ?		

7. NUMBER OF HEPA VACUUMS _____		
8. PLASTIC DROP CLOTH ?		
9. AMENDED WATER SPRAYER READY ?		
10. NIOSH APPROVED RESPIRATORS (TYPE)_____		
11. RESPIRATOR FILTERS (TYPE) _____		
12. DISPOSABLE SUITS ?		
13. **WASTE DISPOSAL:**		
A. 6 MIL BAGS ?		
B. DRUMS ?		
C. WARNING LABELS ON BAGS OR DRUMS ?		
D. OWNER LABELS ON BAGS OR DRUMS ?		
E. DECONTAMINATION DEBRIS DISPOSAL ?		
F. WASTE WATER HANDLING (FILTERED ?) ?		
14.		
15.		
16.		
17.		
18.		
19.		
20.		

SPECIAL REQUIREMENTS				
NOTICE TO PROCEED:	YES		NO	**DATE ISSUED:**
COMMENTS:				
AOC SAFETY INSPECTOR:			DATE:	

J-2.0 SUPERVISOR / COMPETENT PERSON's DAILY PROJECT LOG: At the walk-through to layout the containment area, the **Competent Person** shall start their daily project log. All subjects pertaining to the containment operation shall be logged. The **Jurisdiction Asbestos Management Coordinator** shall ensure that all information is provided to the **Competent Person** that affects the containment operation.

★ ★ SUPERVISOR / COMPETENT PERSON's DAILY PROJECT LOG ★ ★	
SUPERVISOR / COMPETENT PERSON:	DATE:
PROJECT NUMBER:	BUILDING:

NOTE: Fill in GENERAL comments on routine progress on this project on the date above. DETAIL major problems, actions taken, injuries, equipment breakdown, or any unusual conditions, situations, inspections and any other occurrence which may affect the job.

Time	Item

Page ( ) of ( ) pages

Signature:	

J-3.0 DAILY PERSONNEL LIST:

J-3.1 The **Competent Person** shall maintain a daily personnel list of all people who enter the containment area on a given date. Different persons need to enter the containment area for different reasons. At no time shall the **Competent Person** allow anyone entry into the containment area unless evidence is provided that they have had a medical clearance within the last 12 months, current EPA certification training and they have been fit tested for their respirator.

J-3.2 The **Competent Person** shall not allow persons who are not AOC employees, entry into their containment area without verbal or written permission from the Head, Safety Engineering Division (SED) or the assigned **SED Inspector.** If written permission is produced, it shall be verified by the **Competent Person** by calling the SED at telephone number 225-4043 before allowing entry into the containment area.

* * DAILY PERSONNEL LIST * *

SUPERVISOR / COMPETENT PERSON:	DATE:
PROJECT NUMBER:	BUILDING:

The following is a list of persons entering the work area at (state location of work area):_____

_____

on (Date):_____

Name	Section

J-4.0 RESPIRATOR FIT TEST: The **Competent Person** shall ensure that all persons entering and/or working in the containment area have been fit tested for the respirator they are using. Copies of the fit test shall be maintained by the **Competent Person.**

* * RESPIRATOR FIT TEST * *

EMPLOYEE NAME:	
SECTION :	
JOB TITLE :	
RESPIRATOR TYPE & MODEL & SIZE :	

FIT TEST METHOD	Irritant Smoke	Isoamyl Acetate	Other
Breathe Normally			
Breathe Deeply			
Turn Head Side to Side			
Nod Head Up-and-down			
Talking / Rainbow Passage			
Jogging in Place			
Breathe Normally			

GRADE EACH ACTION AS THEY APPEAR ABOVE: P = PASS F = FAILED

RESPIRATOR FIT TEST RESULTS :	
	Enter PASS or FAILED above.

COMMENTS

TESTED BY :		DATE:	
EMPLOYEE SIGNATURE:		DATE:	

J-5.0 DAILY CONTAINMENT INSPECTIONS: OSHA requires the **Competent Person** to inspect their containment area daily. To accomplish this, the use of the following inspection form is required.

* * DAILY ASBESTOS ABATEMENT INSPECTION FORM * *

PROJECT NUMBER: _____ DATE: _____

BUILDING: _____

PROJECT LOCATION: _____

COMPETENT PERSON: _____ PHONE #: _____

CREW SIZE: _____

ASBESTOS ABATEMENT INSPECTION

WORK AREA	SAT	UNSAT
1. Work area isolated ?		
2. All openings to work area sealed ?		
3. Air movement system sealed off ?		
4. Entry to work area controlled ?		
5. EPA / OSHA / AOC UAMP posted ?		
PERSONNEL PROTECTION EQUIPMENT		
1. NIOSH approved respirators ? TYPE:_____		
2. Disposal Suits ? Worn properly ?		
3. Head covering ?		
4. Foot / Shoe covering ?		
5. DECONTAMINATION SYSTEM:		
A. Clean Room:		
1. Sanitary condition maintained ?		
2. Container for disposal of respirator filters ?		
3. Airlock to shower ?		
4. Towels available ?		
B. Shower Room:		
1. Soap available ?		

(1)

PERSONNEL PROTECTION EQUIPMENT (cont.)	SAT	UNSAT
2. Sanitary conditions maintained ?		
3. Filtering units on drain lines from shower ?		
4. Airlock to inside change room ?		
C. EQUIPMENT ROOM:		
1. Disposal bin for contaminated clothing ?		
2. Sanitary conditions maintained ?		
3. Airlock to work area ?°		
WORK PRACTICES		
1. Area wet methods being applied ?		
a. Prior to removal ?		
b. During removal ?		
c. Is debris kept wet till bagged ?		
2. EPA recommended wetting agents used ?		
3. Are HEPA filtered vacuums being used ?		
4. Equipment decontaminated before removal from work area?		
5. Stationary items in work area covered & sealed ?		
6. Is pre & box filter on neg. air machines being changed?		
7. Are 6 mil bags used ?		
8. Are bags properly labeled ?		
9. Is all waste doubled-bagged ?		
10. Decontamination of bags ?		
11. Workers wear protective clothing in work area ?		
12. Are respirators being worn at all times ?		
a. Straps under hood of coveralls ?		
13. Are workers using shower ?		
14. Number of negative air machines being used ?_____		
15. Number of air changes per hour ? _____		
16. Negative pressure in work area ?_____		

WORK PRACTICES (cont.)	SAT	UNSAT
17. Is work proceeding from the decontamination unit to the negative air machines ?		
18. Inspection of barriers for cuts, tears, falling down ?		
a. Walls ?		
b. Floors ?		
19. Proper cleaning techniques used ?		
DISPOSAL		
1. Outside of all containers wet-cleaned and HEPA vacuumed before leaving the work area ?		
2. Condition of containers in storage area ?		
ADDITIONAL ITEMS INSPECTED		
1. _____		
2. _____		
3. _____		
4. _____		
5. _____		
6. _____		
7. _____		
8. _____		
9. _____		
10. _____		

COMMENTS

Competent Person:		Date:	

J-6.0 FIBER RELEASE EPISODE REPORT:

J-6.1 The **Jurisdiction Asbestos Management Coordinator**, is required to report all asbestos fiber release episodes to the **SED Inspector**.

J-6.2 If the fiber release was in conjunction with a containment operation, the **Competent Person** shall complete this report.

FIBER RELEASE EPISODE REPORT

Building:_____

Address: _____

Area: _____ Date:_____

Episode Reported By:_____ Date:_____

(Name, Title) Phone:_____

Type of Material:_____ Surfacing_____ Miscellaneous_____

Thermal System Insulation_____

Approximate Amount of Material Released:_____

Asbestos Type and content (If Known): _____

Cause of Release:
Deterioration _____ Physical Damage _____
Delamination _____ Vandalism _____
Water Damage _____ Maintenance Activity _____

Was area sealed off from nonessential personnel? Yes _____
No _____

How:_____

Was air handling system shut down/modified? Shut Down _____
Modified _____
No _____

Description of Clean-up Procedures:

_____
_____
_____
_____
_____
_____

Clean-Up Conducted by: Outside Contractor _____ In-House _____

Name of Contractor:_____
Response Team Leader: _____
Address: _____

Equipment Used:
HEPA Vacuum _____ Respirators _____
Wet Wiping _____ Protective Clothing _____
Steam Cleaning _____ Other (Specify)_____

Was Safety Eng. Div. contacted regarding release? Yes____ Date:_____
No ____

Person Contacted: _____
Title:_____ Phone:_____

Was follow-up letter/information sent? Yes___ No___ Date:_____

Signed:_____ Date:_____
(Asbestos Program Manager)

J-7.0 VISUAL ASBESOTS ABATEMENT INSPECTION: Two (2) visual inspections shall be performed on all asbestos removal operations. One, shall be performed by the **Competent Person** prior to the visual inspection by the **SED Inspector.**

* * VISUAL ASBESTOS ABATEMENT INSPECTION FORM * *

PROJECT NUMBER: _____ DATE: _____

BUILDING: _____

PROJECT LOCATION: _____

COMPETENT PERSON: _____ PHONE #: _____

CREW SIZE: _____

VISUAL ASBESTOS ABATEMENT INSPECTION

	SAT	UNSAT
1. ALL ASBESTOS IN SCOPE OF WORK REMOVED ?		
2. AIR LOCK (Clean Stage Clean) ?		
3. AIR LOCK (Shower Stage Clean) ?		
4. AIR LOCK (Dirty/Equipment Stage Clean) ?		
5. CONDITION OF ENTIRE AIR LOCK ?		
6. FLOORS IN WORK AREA CLEAN OF DUST AND DEBRIS ?		
7. WALLS IN WORK AREA CLEAN OF DUST AND DEBRIS ?		
8. PIPES / PIPES HANGERS CLEAN OF ACM, DUST AND DEBRIS ?		
9. DUCT WORK CLEAN OF ACM, DUST AND DEBRIS ?		
10. LIGHT FIXTURES CLEAN OF DUST AND DEBRIS ?		
11. ALL HORIZONTAL SURFACES CLEAN OF DUST AND DEBRIS ?		
12. ALL VERTICAL SURFACES CLEAN OF DUST AND DEBRIS ?		
13. NEG. AIR MACHINE PRE & BOX FILTER CLEAN ?		
14. ALL UN-NECESSARY ABATEMENT EQUIP. REMOVED ?		
15. **IS ENTIRE ABATEMENT AREA VISUALLY CLEAN AND READY FOR ENCAPSULATION.**		

SIGNATURE OF THE PERSON PERFORMING THE INSPECTION:		TITLE:	

J-8.0 AIR MONITORING: Air sampling shall be recorded on this form for the types of air samples indicated.

* * AIR MONITORING DATA SHEET * *

DATE:

PROJECT NUMBER: BUILDING:

PROJECT LOCATION:

COMPETENT PERSON : PHONE #:

AIR MONITORING DATA

SAMPLE NUMBER	SAMPLE LOCATION	TEM PCM	TIME ON	TIME OFF	TOTAL TIME	FLOW RATE	TOTAL VOL.	SAMPLE RESULTS

* * REASON FOR AIR MONITORING * *

☐ -AREA ☐ -FINAL ☐ -AHERA FINAL

☐ -AREA FOR GLOVEBAG ☐ -AGGRESSIVE ☐ --NON-AGGRESSIVE

SAMPLES TAKEN BY: DATE:

Page ☐ of ☐

J-9.0 AUTHORIZATION FOR ASBESTOS CONTAINMENT TEARDOWN: Once final air samples have been analyzed and results are received, the **SED Inspector** shall issue an authorization for containment teardown. To standardize this action, this form shall be used.

* * AUTHORIZATION FOR ASBESTOS CONTAINMENT TEARDOWN * *

PROJECT NUMBER:

TO: _____

_____

_____

FROM: ARCHITECT OF THE CAPITOL
SAFETY ENGINEERING DIVISION
WASHINGTON, D.C. 20515

Based on visual inspection and final ☐ aggressive ☐ nonaggressive air samples, permission is granted to remove the containment area listed below. The results indicate the area is visually clean and fiber in-air concentrations are less than 0.01 f/cc, which meets EPA recommended value for reoccupancy after a asbestos abatement action.

BUILDING: _____ DATE: _____

AREA: _____ TIME: _____

AIR SAMPLE ANALYSIS

SAMPLE NUMBER	VOLUME (LITERS)	TOTAL FIBERS COUNTED	TOTAL FIELDS COUNTED	RESULTS F/CC

This analysis was conducted in accordance with mandatory OSHA reference, 29 CFR parts 1910.1001 and 1926.1101 (appendices A and B), NIOSH 7400 method for Phase Contrast Microscopy dated 8-15-94 and EPA (silver book) number 600/4-85-049- Measuring Airborne Asbestos Following an Abatement Action.

Samples Collected By: _____ Date: _____

Samples Analyzed By: _____ Date: _____

SIGNATURE: _____ TITLE: _____

cc: Messrs. Hanlon, Bowman, Project File.

J-10.0 FINAL AREA INSPECTION: A final area inspection shall be performed by the **Competent Person** at the conclusion of the containment operation.

* * FINAL AREA INSPECTION FORM * *

PROJECT NUMBER: _____ DATE: _____

BUILDING: _____

PROJECT LOCATION: _____

COMPETENT PERSON: _____ PHONE #: _____

CREW SIZE: _____

AREA INSPECTION

1. TYPE OF ASBESTOS REMOVAL (Specify) ?	
2. METHOD OF ASBESTOS REMOVAL ? (containment//GB)	
3. SCOPE OF WORK (QUANTITY REMOVED, LF, SF) ?	
4. WAS ALL ASBESTOS IN SCOPE OF WORK REMOVED ?	
5. IS THE ENDS OF DUCTS/PIPES etc. COVERED ?	
6. HAS ALL POLY BEEN REMOVED ?	
7. IS THERE ANY VISIBLE DIRT OR OTHER DEBRIS ?	
8. IS THE ENTIRE AREA CLEAN ?	
9. HAS ALL WASTE BEEN REMOVED FROM THE AREA ?	
10. HAS THE JURISDICTION ASBESTOS MANAGEMENT COORDINATOR CHECK THIS AREA ?	
11. HAS ALL DOCUMENTATION FOR THE JOB BEEN FORWARDED TO THE JURISDICTION ASBESTOS MANAGEMENT COORDINATOR ?	

COMMENTS:

COMPETENT PERSON SIGNATURE: _____

J-11.0 PERSONAL AIR MONITORING: OSHA requires that the **Competent Person** perform personal air monitoring on each asbestos operation. To document the air sampling this form shall be used.

* * PERSONAL AIR MONITORING DATA SHEET * *

PROJECT NUMBER: _____ DATE: _____

PROJECT LOCATION : _____

PERSONAL DATA

EMPLOYEE SAMPLED: _____ SSAN: _____

JOB FUNCTION: _____

(CREW LEADER, WORKER)

DESCRIBE TYPE OF WORK BEING PERFORMED DURING THE SAMPLING : _____

TYPE OF RESPIRATOR BEING USED DURING SAMPLING : _____

EMPLOYEE SIGNATURE: _____ DATE: _____

PERSONAL SAMPLING DATA

SAMPLE NUMBER	Calibrated Flow (Liters/Min.) START	STOP	Test Period (Time) START	STOP	LOCATION	RESULTS

TYPE OF WORK AREA

CONTAINMENT:		MINI-CONTAINMENT:		GLOVE-BAG:	

NEGATIVE PRESSURE READING OF CONTAINMENT:	

AIR MONITORING PERFORMED BY:			
COMPETENT SIGNATURE:		DATE:	

NOTE: All blocks / blanks must be clearly filled out to document compliance of personal air sampling.

J-12.0 NEGATIVE EXPOSURE ASSESSMENT:

J-12.1 OSHA requires that the **Competent Person** perform a negative exposure assessment on Class I, II, III operations. To accomplish this, this form has been developed.

J-12.2 Exposure Assessment Instructions:

J-12.2.1 In accordance with OSHA, 29 CFR 1926.1101 (f)(2), for each workplace covered by 29 CFR 1926.1101, the AOC shall ensure that a **"Competent Person"** conducts an exposure assessment immediately before or at the initiation of an asbestos abatement operation to ascertain expected exposures during the abatement action.

J-12.2.2 An exposure assessment must be completed in time to comply with requirements which are triggered by exposure data or the lack of a "negative exposure assessment", and to provide information necessary to assure that all control systems planned are appropriate for the operation and will work properly.

J-12.2.3 The following form has been developed to assist the **Competent Person** in performing the task of conducting a exposure assessment. This form is in two (2) parts, (1) the "initial exposure assessment" and (2) the "negative exposure assessment".

(a) Answer questions 1 through 6 of the initial exposure assessment, attaching any documentation. The assessment may conclude that exposures are <u>likely</u> to be CONSISTENTLY <u>below</u> the PEL's. The **Competent Person** shall then perform the NEGATIVE EXPOSURE ASSESSMENT.

(b) Answer the questions in the NEGATIVE EXPOSURE ASSESSMENT section, attaching any documentation.

J-12.2.4 The data from the NEGATIVE EXPOSURE ASSESSMENT may show that there is a high degree of certainty that employee exposures will not exceed the OSHA PEL and Excursion limit. If so, exposure monitoring can be suspended with the approval of the **SED Inspector.**

J-12.2.5 If exposure data shows that the OSHA PEL and excursion limit is exceeded, then daily monitoring continues. Daily personal air monitoring shall be conducted that is representative of the exposure of each employee assigned to work within a regulated area, who is performing Class I or Class II work, unless the **Competent Person** has made a negative exposure assessment for the entire operation.

J-12-2.6 If the **Competent Person** receives approval to suspend personal air monitoring as a result of a NEGATIVE EXPOSURE ASSESSMENT, the **Competent Person** shall conduct periodic personal air monitoring of all work where exposures are expected to exceed a PEL, at intervals sufficient to document the negative exposure prediction.

J-12.2.7 Personal air monitoring shall be resumed whenever there has been a change in work process, control equipment, personnel, or work practices that may result in new or additional exposures above the PEL or excursion limit. If the **Competent Person** has any reason to suspect that new or additional exposures above the PEL or Excursion limit may occur, then person air monitoring shall be resumed.

** EXPOSURE ASSESSMENT **

PROJECT NUMBER: _____ DATE: _____

BUILDING: _____

PROJECT LOCATION: _____

COMPETENT PERSON: _____ PHONE #: _____

CREW SIZE: _____

** INITIAL EXPOSURE ASSESSMENT **

	YES	NO
1. Personal exposure monitoring; Representative 8 hour TWA employee exposure of one or more samples representing full shift exposures of employees in work area where the results are above the 8 hour TWA ?		
2. Number of personal samples taken for 1. above _____		
3. Personal exposure monitoring; Representative 30 minute short term employee exposure of one or more samples representing 30 minute exposures associated with operations that are most likely to produce exposures above the excursion limit for employees which results are above the excursion limit ?		
4. Number of personal 30 minute samples taken for 2. above ? _____		
5. Documentation of all observations, information or calculations which indicate employee exposure to asbestos, including any previous monitoring conducted in the work place or the operations which indicate the levels of airborne asbestos likely to be encountered on the job ?		
6. Are Results of the 8 hour TWA's and 30 minute exposure's below the established OSHA limits ? *(If YES, then proceed with the negative exposure assessment. If NO then 8 hour TWA and 30 minute sampling must be continued daily.*		

NOTE: Suspension of personal 8 hour TWA and 30 minute exposure daily monitoring must be approved by the AOC Safety Engineering Division.

* * NEGATIVE EXPOSURE ASSESSMENT * *		
	YES	NO
1. Employees trained IAW 29 CFR 1926.1101 ?		
2. Data demonstrating that the product or material containing asbestos materials or the activity involving such product or materials cannot release airborne fibers in concentrations exceeding the TWA and excursion limit under those work conditions having the greatest potential for releasing asbestos ?		
3. Monitoring results for prior asbestos jobs for the PEL and excursion limit within 12 months of the current or projected job ?		
4. These monitoring and analysis were performed in compliance with the OSHA standard in effect ?		
5. The exposure data from 3 above was obtained during work place conditions "Closely Resembling":		
a. The proposed work process ?		
b. The type of asbestos material ?		
c. The control methods ?		
d. The work practices ?		
e. The environmental conditions used and prevailing in the current work operations ?		
f. The work was conducted by employees whose training and experience are no more extensive than that of employees performing this job ?		
6. Results of the initial exposure monitoring of the current job was made from breathing zone air samples that are representative of the 8 hour TWA and 30 minute short term exposures of each employee covering work operations which are most likely during the performance of the entire asbestos job to result in exposures over the PEL ?		

	YES	NO
7. The results from question 3 and 6 above shows that exposures are likely to be CONSISTENTLY below the PEL's and excursion limit ?		
8. Does data show that under the conditions prevailing and which will prevail in this WORK PLACE there is a high degree of certainty that employee exposures will NOT exceed the OSHA PEL and EXCURSION limit.		

NOTE: If question 8 above is YES then a NEGATIVE EXPOSURE ASSESSMENT has been successfully completed. With the approval of the AOC Safety Eng. Div. personal monitoring can be either suspended or not performed until provisions of paragraph 7 apply.

I CERTIFY THAT THE ABOVE INITIAL EXPOSURE ASSESSMENT AND NEGATIVE EXPOSURE ASSESSMENT WAS CONDUCTED IN ACCORDANCE WITH 28 CFR 1926.1101 (f).

NAME OF COMPETENT PERSON	SIGNATURE	COMPETENT PERSON's "Certification Number"

J-13.0 EPA REQUIRED DOCUMENTATION:

J-13.1 PLACE A COPY OF EACH INDIVIDUAL's TRAINING EPA's CERTIFICATION HERE

J-13.0 EPA REQUIRED DOCUMENTATION:

J-13.2 PLACE A COPY OF EACH INDIVIDUAL's MEDICAL CLEARANCE HERE.

J-14.0 ASBESTOS INFORMATION REPORT: A completed copy of the asbestos information report shall be maintained by the **Competent Person** on the job site.

NOTIFICATION OF DEMOLITION AND RENOVATION

Operator Proj. #	Postmark	Date Received	Notification #

I. TITLE OF NOTIFICATION (O-Original; R-Revised; C-Cancelled):

II. FACILITY INFORMATION (Identify owner, removal contractor, and other operator):

OWNER NAME:		
Address:		
City:	State:	Zip:
Contact:		Tel:
REMOVAL CONTRACTOR:		
Address:		
City:	State:	Zip:
Contact:		Tel:
OTHER OPERATOR:		
Address:		
City:	State:	Zip:
Contact:		Tel:

III. TYPE OF OPERATION (D-Demo; O-Ordered Demo; R-Renovation; E-Emergency Renovation):

IV. IS ASBESTOS PRESENT? (Yes/No):

V. FACILITY DESCRIPTION (Include building name, number and floor or room number):

Bldg. Name:		
Address:		
City:	State:	County:
Site Location:		
Building Size:	# of Floors:	Age in Years:
Present Use:	Prior Use:	

VI. PROCEDURE, INCLUDING ANALYTICAL METHOD, IF APPROPRIATE, USED TO DETECT THE PRESENCE OF ASBESTOS MATERIAL:

VII. APPROPRIATE AMOUNT OF ASBESTOS, INCLUDING: 1. Regulated ACM To Be Removed 2. Category I ACM Not Removed 3. Category II ACM Not Removed		RACM To Be Removed	Nonfriable Asbestos Material Not To Be Removed		Indicate Unit of Measurement Below	
			CAT I	CAT II	UNIT	
Pipes					Ln Ft	Ln m
Surface Area					Sq Ft	Sq m
Vol. RACM Off Facility Component					Cu Ft	Cu m

VIII. SCHEDULED DATES ASBESTOS REMOVAL (MM/DD/YY)

Start: Complete:

IX. SCHEDULED DATES DEMO/RENOVATION (MM/DD/YY)

Start: Complete:

NOTIFICATION OF DEMOLITION AND RENOVATION (continued)

X.	DESCRIPTION OF PLANNED DEMOLITION OR RENOVATION WORK, AND METHOD(S) TO BE USED:		
XI.	DESCRIPTION OF WORK PRACTICES AND ENGINEERING CONTROLS TO BE USED TO PREVENT EMISSIONS OF ASBESTOS AT THE DEMOLITION AND RENOVATION SITE:		
XII.	WASTE TRANSPORTER #1:		
	Name:		
	Address:		
	City:	State:	Zip:
	Contact Person:		Tel:
	WASTE TRANSPORTER #2: (if applicable)		
	Name:		
	Address:		
	City:	State:	Zip:
	Contact Person:		Tel:
XIII.	WASTE DISPOSAL SITE:		
	Name:		
	Address:		
	City:	State:	Zip:
	Contact:		Tel:
XIV.	IF DEMOLITION ORDERED BY A GOVERNMENT AGENCY, PLEASE IDENTIFY THE AGENCY BELOW:		
	Name:	Title:	
	Authority:		
	Date of Order (MM/DD/YY):	Date Ordered to Begin (MM/DD/YY):	
XV.	FOR EMERGENCY RENOVATIONS:		
	Date and Hour of Emergency (DD/MM/YY):		
	Description of the Sudden, Unexpected Event:		
	Explanation of how the event caused unsafe conditions or would cause equipment damage or an unreasonable financial burden:		
XVI.	DESCRIPTION OF PROCEDURES TO BE FOLLOWED IN THE EVENT THAT UNEXPECTED ASBESTOS IS FOUND OR PREVIOUSLY NONFRIABLE ASBESTOS MATERIAL BECOMES CRUMBLED, PULVERIZED, OR REDUCED TO POWDER:		
XVII.	I CERTIFY THAT AN INDIVIDUAL TRAINED IN THE PROVISIONS OF THIS REGULATION (40 CFR, Part 61, SUBPART M) WILL BE ON-SITE DURING THE DEMOLITION OR RENOVATION AND EVIDENCE THAT THE REQUIRED TRAINING HAS BEEN ACCOMPLISHED BY THIS PERSON WILL BE AVAILABLE FOR INSPECTION DURING NORMAL BUSINESS HOURS (Required 1 year after promulgation).		
	_____ (Date)	_____ (Signature of Owner/Operator)	
XVIII.	I CERTIFY THAT THE ABOVE INFORMATION IS CORRECT.		
	_____ (Date)	_____ (Signature of Owner/Operator)	

J-15.0 GLOVE BAG INSPECTION: Each glove bag shall be inspected be the **Competent Person** prior to performing the removal. The following form is provided to accomplish this task. Copies of the completed inspections shall be maintained by the **Competent Person** on the job site for inspection.

★ ★ ASBESTOS GLOVE BAG ABATEMENT INSPECTION FORM ★ ★

PROJECT NUMBER: _____ DATE: _____

BUILDING: _____

PROJECT LOCATION: _____

COMPETENT PERSON: _____ PHONE #: _____

CREW SIZE: _____

GLOVE BAG INSPECTION

	SAT	UNSAT
1. ARE TWO WORKERS BEING USED ?		
2. RESPIRATOR AND SUIT WORN BY WORKERS ?		
3. SIDES AND BOTTOM OF GLOVE BAG REINFORCED WITH TAPE ?		
4. HEPA-VAC & AIRLESS SPRAYER w/ AMENDED WATER HOOKED UP?		
5. GLOVE BAG SMOKE TESTED FOR LEAKS ?		
6. 6 mill. POLY ON FLOOR UNDER GLOVE BAG ?		
7. ACM REMOVED WET ?		
8. INSPECTION OF AREA THAT ACM WAS REMOVED ?		
9. PROCEDURES USED TO REMOVE THE GLOVE BAG ?		
10. BAGGING UP OF GLOVE BAG ?		
11. DANGER AND OWNER LABELS ON BAGS ?		
12. WORKER PERFORMANCE ?		

UNSAT REMARKS/COMMENTS:

PERSON PERFORMING INSPECTION:	
TITLE:	

APPENDIX V ----
TESTING OF HEPA-FILTERED EQUIPMENT

V-1.0 EQUIPMENT COVERED: High-Efficiency Particulate Air (HEPA) filtered equipment includes negative air machines and vacuums.

V-2.0 REFERENCES:

V-2.1 40 CFR Part 61, paragraph 61-152(a) & (b)(2).

V-2.2 29 CFR 1926.1101(g)(1)(i) & (2)(iii).

V-2.3 "Quantitative Evaluation of HEPA Filtration Systems at Asbestos Abatement Sites," 1993, Performed by: Environmental Quality Management, Inc. Cincinnati, OH.

V-2.4 U.S. EPA, Risk Reduction Engineering Laboratory, Cincinnati, OH.

V-2.5 New Jersey Department of Health, Trenton, N.J.

V-2.6 National Institute of Building Sciences, "Asbestos Abatement & Management in Buildings," Model Guide Specifications. (1993)

V-3.0 DEFINITIONS: A HEPA filter is defined by OSHA and EPA as "*a filter which is capable of trapping and retaining at least 99.97 percent of all mono-dispersed particles of 0.3 micrometers in diameter.*" OSHA and EPA direct that HEPA filtered exhaust units shall be utilized on all negative pressure enclosures. And, HEPA filtered vacuums shall be used for cleaning-up inside these enclosures, and during glove bagging or decontamination operations. This requirement is to prevent personal exposure to asbestos fibers at or above the OSHA time weighted average exposure limits or excursion limits.

V-4.0 TESTING RECOMMENDATIONS:

V-4.1 Studies recommend in-place testing of each unit. Each unit should be certified to show that the unit is filtering at an efficiency of not less than 99.97 percent when challenged with 0.3- μm dioctylphthalate (DOP) particles. This in-place test is commonly known as a "DOP test," since the tester uses the reference material "DOP" to certify filter efficiency.

V-4.2 Units should be tested:

- V-4.2.1 at least annually, and
- V-4.2.2 at every HEPA filter replacement; or
- V-4.2.3 when damage to the unit is suspected or has occurred, or
- V-4.2.4 when the unit has been dropped (which could have dislodged the HEPA filter from the rubber seals, thereby reducing the unit efficiency).

V-4.3 These studies have also shown HEPA filtered equipment used in asbestos abatement operations can operate below minimum filtering efficiency guidelines. Since the primary purpose of such a unit is to help prevent the release of particulate to surrounding areas, substandard performance can result in a significant concentration of asbestos in the unit's discharge air stream. Damaged or improperly installed HEPA filters, leaks in the mounting frame and the housing, all of which would cause the air to bypass the HEPA filter; are possible causes for substandard performance. In-place testing is required to ensure that the units are operating at the required efficiency.

V-5.0 POLICY: All AOC HEPA filtered equipment that is used in any asbestos abatement operation shall be "DOP tested" prior to use, and at the frequencies outlined in the section below. This testing will ensure that the units are filtering at the recommended efficiency as required by OSHA and EPA.

V-6.0 RESPONSIBILITIES:

V-6.1 The **SED Inspector** shall:

V-6.1.1 Locate and secure "DOP testing" services.

V-6.1.2 Schedule, document and supervise the "DOP testing" of all AOC HEPA filtered equipment.

V-6.1.3 A method shall be established and maintained that identifies each individual, AOC owned piece of HEPA filtered equipment, indicating the last "DOP test" date and results.

V-6.1.4 Based on the results of the "DOP test," the **SED Inspector** shall then authorize the use of the HEPA filtered equipment for asbestos abatement operations.

V-6.2 The following actions shall be performed:

V-6.2.1 For on-hand HEPA filtered equipment to date; each jurisdiction that utilizes HEPA filtered equipment for asbestos abatement operations shall provide the **SED Inspector** with a list detailing pieces of equipment by serial number, type and size.

V-6.2.2 A filter log for each piece of HEPA filtered equipment shall be maintained by the jurisdiction.

V-6.2.3 If no HEPA filter log is currently available, then one will be created. Information on the HEPA filter log shall include; date the HEPA filter unit was placed into operation, date of the last HEPA filter change, and the date of the last "DOP test."

V-6.2.4 If no "DOP test" has been performed since purchasing the HEPA filtered equipment, the **SED Inspector** shall schedule the equipment for "DOP testing." The HEPA filtered equipment shall be placed out-of-service until passing the "DOP test."

V-6.3 New HEPA-Filtered Equipment:

V-6.3.1 No new HEPA filtered equipment purchased by an AOC jurisdiction shall be utilized in any asbestos abatement operation until:

(a) A manufacturer "DOP test" result is provided to a **SED Inspector** for the new unit, showing that the unit is filtering at the efficiency required by OSHA and EPA. Upon receipt of the results, the **SED Inspector** will authorize the equipment for use in asbestos abatement operations.

(b) If no "DOP testing" results are provided by the manufacturer for the new unit, the unit shall not be used in any asbestos abatement operation until "DOP tested," as detailed in Item #2 immediately above. The jurisdiction shall schedule through the **SED Inspector** to have the unit "DOP tested" at the jurisdiction's expense.

(c) The HEPA filtered equipment is identified by a serial number.

V-7.0 "DOP TESTING" FREQUENCIES:

V-7.1 As recommended in the studies performed on HEPA filtered equipment, and after complying with the appropriate paragraph above, "DOP testing" of AOC HEPA filtered equipment shall be performed at the following intervals:

V-7.1.1 After each changing of the HEPA filter.

V-7.1.2 Every six 6 months.

V-7.2 If the **SED Inspector** or **Competent Person** finds or suspects the HEPA filtered unit in any asbestos abatement operation is not filtering properly, or observes the equipment being dropped or handled roughly the following actions shall be immediately taken:

V-7.2.1 The equipment shall be placed out of service.

V-7.2.2 The equipment shall be "DOP tested."

V-7.2.3 After the equipment passes a "DOP test," it shall be re-authorized for use by the **SED Inspector**.

APPENDIX W ----
TECHNICAL / COMPLIANCE
REFERENCES & RESOURCES

W-1.0 REGULATIONS. The AOC shall comply with the following regulations in all applications of its UAMP.

W-1.1 40 CFR 61, Subpart M, EPA National Emission Standards for Hazardous Air Pollutants (NESHAP) for Asbestos.

W-1.2 40 CFR 763, Subpart E, Appendix C, EPA Model Accreditation Plan (MAP).

W-1.3 29 CFR 1926.1101, OSHA Asbestos Construction Standard.

W-1.4 29 CFR 1910.1001, OSHA Asbestos General Industry Standard.

W-1.5 Toxic Substance Control Act (ToSCA).

W-1.6 The Clean Air Act (CAA).

W-1.7 Asbestos Hazard Emergency Response Act (AHERA).

W-1.8 Asbestos School Hazard Abatement Reauthorization Act (ASHARA, 1990). *Note: Includes Public and Commercial Buildings.*

W-2.0 OTHER REFERENCES: The AOC shall comply with the following guidelines and policies when application of its UAMP warrants.

W-2.1 "Managing Asbestos In Place: A Building Owner's Guide to Operations and Maintenance Programs for Asbestos Containing Materials," 1990, (EPA), EPA 20T-2003.

W-2.2 "Guidance for Controlling Asbestos Containing Materials in Buildings," 1985, (EPA), EPA 560/5-85-024.

W-2.3 "Measuring Airborne Asbestos Following An Abatement Action," EPA 600/4-85-049.

W-2.4 "Guidance for Conducting the AHERA TEM Clearance Test to Determine Completion of an Asbestos Abatement Project," 1989, (EPA), EPA 560 5-89-001.

W-2.5 "Simplified Sampling Scheme for Friable Surfacing Materials," EPA 560 / 5-85-030a.

APPENDIX X ----
SAMPLING

X-1.0 AREA AIR SAMPLING:

X-1.1 Direction:

X-1.1.1 The following area monitoring requirement is in excess of the established EPA and OSHA standards. This monitoring criteria was developed in order to comply with *THE ARCHITECT OF THE CAPITOL's* order to establish limits more stringent than existing federal laws, rules and standards involving asbestos work operations.

X-1.1.2 All area air sampling for asbestos is the responsibility of the **AOC Asbestos Management Coordinator.**

X-1.2 Background; Area Air Samples For Asbestos:

X-1.2.1 Two microscopic methods are currently being used to analyze airborne asbestos: phase contrast microscopy (PCM) and transmission electron microscopy (TEM). Because asbestos fibers are small (especially those found in buildings with ACM) and difficult to distinguish from other types of fibers, the detection and accurate identification of asbestos requires sophisticated methods of analysis.

X-1.2.2 TEM is the best method for measuring airborne asbestos. This test can detect very thin fibers (typically down to 0.0025 μm diameter) found in buildings with ACM and in the ambient atmosphere. This test identifies asbestos without question. A standard protocol for TEM analysis exists.

X-1.2.3 PCM is less sensitive to thin fibers and less specific for asbestos. When used in accordance with existing NIOSH protocols, this test cannot detect fibers smaller than 0.25 μm in diameter, and cannot distinguish asbestos fibers from other types of fibers. As a result, PCM results can only be considered an index of airborne asbestos levels. This test method is also based upon a well-developed protocol, and approved laboratories usually operate within NIOSH testing programs.

X-1.2.4 With respect to method availability, cost, and "turnaround time" (i.e., the time between submission of samples and receipt of results), PCM is superior on all accounts. It is by far the most available and the least expensive test. The turnaround time is normally less than for TEM.

X-1.3 Choosing Area Air Sampling; Recommendations: Either TEM or PCM should be used to analyze air samples for asbestos fibers. TEM is the method of choice, but PCM is more practical.

X-1.4 Area Air Sampling Procedures:

X-1.4.1 Air sampling is conducted by drawing air through a filter at a known rate. Typically, flow-controlled pumps and either cellulose ester or polycarbonate filters (depending on the method of sample analysis) are used. Specific sampling procedures should be followed in order to assure reliability of the results.

X-1.4.2 In addition to the use of appropriate sampling equipment, the sampling plan must be carefully designed to account for normal variability in asbestos levels from location-to-location and over time. One of the most important factors which influence the degree of variability in air measurements is the pattern of air movement. Under conditions of limited movement, many fibers will settle out of the air. Measurements of airborne asbestos under these conditions are likely to be lower than if all the fibers were suspended. Artificial agitation of the air in a work area is one way to keep the fibers suspended.

X-1.5 Area Air Sampling Procedures; Recommendations:

X-1.5.1 Use constant-flow sampling pumps and the following filters:

(a) For PCM analysis: cellulose ester filters with 0.8 μm pore size.

(b) For TEM analysis: cellulose ester filters with 0.4 μm pore size.

X-1.5.2 Use the specified procedures for testing and operating sampling equipment.

X-1.5.3 Sample at a flow rate of between 2 and 12 liters per minute (L/min).

X-1.6 Number of Samples: The recommended number of TEM samples and the minimum sampling volume needed to compare measured asbestos levels of the area against the reference level should take into account the expected variability in TEM measurements, how low the reference asbestos level is likely to be, and the detection limit of the TEM method. Sampling requirements for PCM should be at least as rigorous as those for TEM, considering PCM's low sensitivity to thin fibers and lack of specificity for asbestos.

X-1.7 Number of Samples; Recommendations:

X-1.7.1 If the TEM method is used:

(a) Collect five samples within the area plus one field blank, five outside the area sampled plus one field blank and one box blank for a total of 13 samples. Each of the air samples should draw at least 3000 liters of air. The blank samples are for reliability checks as specified for AHERA clearances.

(b) Have the samples analyzed and request the results to be expressed as structures per millimeter (s/mm²).

(c) Compare the averages of the inside and outside levels.

(d) The area is clear if the average result of all inside samples does not exceed 70 s/mm², the AHERA TEM clearance standard.

X-1.7.2 If the PCM method is used:

(a) Collect at least five samples per area or one per room, whichever is greater, each of at least 3,000 liters.

(b) Analyze the samples.

(c) The area is clear if none of the samples are above the PCM limit of reliable quantification (0.01 f/cc).

X-1.8 Quality Assurance Practices: Measuring airborne asbestos is a sophisticated and exacting process. Errors may be introduced at any one of the many data collection and analysis steps. To guard against this possibility and to assure reliable results, a formal quality assurance program should be adopted.

X-1.9 Quality Assurance Practices; Recommendations:

X-1.9.1 Be sure that all persons and organizations involved in sampling and analysis are trained and/or experienced.

X-1.9.2 Use field and laboratory blanks to check for fiber contamination, coded sample labels to avoid analyst bias, duplicate analyses to confirm analytical precision, and a second laboratory to spot-check the accuracy of results. Be sure that all equipment setup, operation, and calibration procedures are followed.

X-1.9.3 Assign responsibility for security of the samples to specific persons at each stage of the analysis. Document each step in the passage of the sample from the field to the laboratory and back.

X-1.9.4 Check and document laboratory results. The **AOC Asbestos Management Coordinator** shall retain all test results and records documenting the testing process.

X-1.10 Area/Perimeter Monitoring During All Asbestos Work Operations:

X-1.10.1 *The following area / perimeter monitoring requirement is in excess of the established EPA and OSHA standards. This monitoring criteria was developed in order to comply with THE ARCHITECT OF THE CAPITOL's order to establish limits more stringent than existing federal laws, rules and standards governing asbestos work operations.*

X-1.10.2:

(a) For all non-emergency Class I work operations and prior to the commencement of asbestos removal, area background air monitoring by PCM shall be performed.

(b) Additionally, for all non-emergency Class I work, where an employees' negative exposure assessment has not been performed or cannot be produced, area and/or perimeter air monitoring measured by PCM shall be conducted daily. These air monitoring levels shall show that clearance levels contained in 40 CFR 763, subpart E, of the EPA Asbestos in Schools Rule are met, or that perimeter area levels are no more than the background levels representing the same area before the asbestos work began.

X-1.10.3:

(a) For all Class II work operations and prior to the commencement of asbestos removal, area background air monitoring by PCM shall be performed.

(b) Additionally, for all Class II work operations, where the ACM is not removed in a substantially intact state, or where an employees' negative exposure assessment has not been performed or cannot be produced, area and/or perimeter air monitoring measured by PCM shall be conducted daily. These air monitoring levels shall show that clearance levels contained in 40 CFR 763, subpart E, of the EPA Asbestos in Schools Rule are met, or that perimeter area levels are no more than the back-ground levels representing the same area before the asbestos work began.

X-1.10.4:

(a) For all non-emergency work operations NOT classified as Class I or II work, which involve the disturbance of thermal system insulation ACM or surfacing ACM material, and prior to the commencement of asbestos removal, area background air monitoring by PCM shall be performed.

(b) Additionally, for all non-emergency work operations NOT classified as Class I or II work, which involve the disturbance of thermal system insulation ACM or surfacing ACM material where an employees' negative exposure assessment has not been performed or cannot be produced, area and/or perimeter air monitoring measured by PCM shall be conducted daily. These air monitoring levels shall show that clearance levels contained in 40 CFR 763, subpart E, of the EPA Asbestos in Schools Rule are met, or that perimeter area levels are no more than the back-ground levels representing the same area before the asbestos work began.

X-2.0 PERSONAL AIR SAMPLES:

X-2.1 Direction: Personal air sampling and the identification of the party(s) who are responsible to make certain samples are taken, are both required and outlined by (OSHA) 29 CFR 1926.1101 for all employees performing asbestos removal, repair and or encapsulation. The **Jurisdiction Asbestos Management Coordinator** or the **Jurisdiction Competent Person** have the responsibility to ensure that personal air samples are taken, to be in compliance with the OSHA standard. Procedures below, are taken directly from (OSHA) 29 CFR 1926.1101. These procedures shall be followed.

X-2.2 Permissible exposure limits (PELS):

X-2.2.1 Time - weighted average (TWA). The **Jurisdiction Asbestos Management Coordinator** or the **Jurisdiction Competent Person** shall ensure that no employee is exposed to an airborne concentration of asbestos in excess of 0.1 fiber per cubic centimeter of air as an eight (8) hour time-weighted average (TWA), as determined by the method prescribed in Appendix A of 29 CFR 1926.1101, or by an equivalent method.

X-2.2.2 Excursion limit. The **Jurisdiction Asbestos Management Coordinator** or the **Jurisdiction Competent Person** shall ensure that no employee is exposed to an airborne concentration of asbestos in excess of 1.0 fiber per cubic centimeter of air (1 f/cc) as averaged over a sampling period of thirty (30) minutes, as determined by the method prescribed in Appendix A of 29 CFR 1926.1101, or by an equivalent method.

X-2.3 Exposure assessments and monitoring; General monitoring criteria:

X-2.3.1 Each appropriation that has a workplace or work operation where exposure monitoring is required under 29 CFR 1926.1101, shall perform monitoring to determine accurately the airborne concentration of asbestos to which employees may be exposed.

X-2.3.2 Determinations of employee exposure shall be made from breathing zone air samples that are representative of the 8-hour TWA and 30-minute short term exposures of each employee.

X-2.3.3 Representative 8-hour TWA employee exposure shall be determined on the basis of one or more samples representing full-shift exposure for employees in each work area. Representative 30-minute short-term employee exposures shall be determined on the basis of one or more samples representing 30 minute exposures associated with operations that are most likely to produce exposure above the excursion limit for employees in each work area.

X-2.4 Initial Exposure Assessment:

X-2.4.1 For work operations covered by 29 CFR 1926.1101, the **Jurisdiction Asbestos Management Coordinator** shall ensure that a "competent person" conducts an exposure assessment immediately before or at the initiation of the operation to ascertain expected exposures during that operation or workplace. The assessment must be completed in time to comply with requirements which are triggered by exposure data or, the lack of a "negative exposure assessment," and to provide information necessary to assure that all control systems planned are appropriate for that operation and will work properly.

X-2.4.2 Basis of Initial Exposure Assessment: The initial exposure assessment shall be based on data derived from the following sources:

(a) If feasible, each appropriation shall monitor employees and base the exposure assessment on the results of exposure monitoring which is conducted pursuant to the criteria in 29 CFR 1926.1101 paragraph (f)(2)(iii).

(b) In addition, the assessment shall include consideration of all observations, information or calculations which indicate employee exposure to asbestos, including any previous monitoring conducted in the workplace, or of the operations of the appropriation which indicate the levels of airborne asbestos likely to be encountered on the job. The assessment, however, may conclude that exposures are likely to be consistently below the PELs only as a conclusion of a "negative exposure assessment" conducted pursuant to 29 CFR 1926.1101(f)(2)(iii).

(c) For Class 1 asbestos work, until the appropriation conducts exposure monitoring and documents that employees on that job will not be exposed in excess of the PEL and

excursion limit, or otherwise makes a negative exposure assessment pursuant to 29 CFR 1926.1101(f) (2)(iii), the appropriation shall presume that employees are exposed in excess of the PEL and excursion limit.

X-2.4.3 Negative Exposure Assessment: For any one specific asbestos job which will be performed by employees who have been trained in compliance with OSHA, the Jurisdiction MAY demonstrate that employee exposures will be below the PELs by data which conforms to the following criteria:

(a) Objective data demonstrating that the product or material containing asbestos minerals or the activity involving such product or material cannot release airborne fibers in concentrations exceeding the TWA and excursion limit under those work conditions having the greatest potential for releasing asbestos; or

(b) Where the Jurisdiction has:

- monitored prior asbestos jobs for the PEL and the excursion limit within 12 months of the current or projected job; or
- performed monitoring and analyses in compliance with the asbestos standard in effect; or
- obtained data during work operations conducted under workplace conditions "closely resembling" the processes, type of material, control methods, work practices, environmental conditions used and prevailing in the Jurisdiction's current operations, and the operations were conducted by employees whose training and experience are no more extensive than that of employees performing the current job, and these data show that, under the conditions prevailing and which will prevail in the current workplace, there is a high degree of certainty that employee exposures will not exceed the TWA and excursion limit; or

(c) The results of initial exposure monitoring of the current job made from breathing zone air samples that are representative of the 8 hour TWA and 30-minute short-term exposures of each employee covering operations which are most likely during the performance of the entire asbestos job to result in exposures over the PEL.

X-2.5 Periodic monitoring:

X-2.5.1 Class I and II operations. The appropriation shall conduct daily monitoring of employee exposure that is representative of the exposure of each employee who is assigned to work within a regulated area who is performing Class I or II work, unless the appropriation pursuant to 29 CFR 1926.1101(f)(2)(iii), has made a negative exposure assessment for the entire operation.

X-2.5.2 All operations other than Class 1 and II operations. The appropriation shall conduct periodic monitoring of all work where exposures are expected to exceed a PEL at intervals sufficient to document the validity of the exposure predictions.

X-2.5.3 *Exception: When all employees required to be monitored daily are equipped with supplied-air respirators, operated in the positive-pressure mode, the appropriation may dispense with the daily monitoring required by this paragraph. Employees performing Class I work, however, using a control method not listed in 29 CFR 1926.1101(g)(4)(i), (ii) or (iii), or using a modification of a listed control method, shall continue to be monitored daily even if they are equipped with supplied air respirators.*

X-2.6 Termination of monitoring:

X-2.6.1 If the periodic monitoring required by 29 CFR 1926.1101 paragraph (f)(3) reveals that employee exposures, as indicated by statistically reliable measurement, are below the

permissible exposure limit and excursion limit the appropriation may discontinue monitoring for those employees whose exposures are represented by such monitoring.

X-2.6.2 Additional monitoring. Not-withstanding, the provisions of paragraph (f)(2), (3), and (4) of 29 CFR 1926.1101, the appropriation shall institute the exposure monitoring required under paragraph (f)(3) of 29 CFR 1926.1101 whenever there has been a change in process, control equipment, personnel or work practices that may result in new or additional exposures above the permissible exposure limit and/or excursion limit or when the appropriation has any reason to suspect that a change may result in new or additional exposures above the permissible exposure limit and/or excursion limit. Such additional monitoring is required regardless of whether a "negative exposure assessment" was previously produced for a specific job.

X-2.7 Observation of monitoring:

X-2.7.1 The appropriation shall provide affected employees and their, designated representatives an opportunity to observe any monitoring of employee exposure to asbestos conducted in accordance with this section.

X-2.7.2 When observation of the monitoring of employee exposure to asbestos requires entry into an area where the use of protective clothing or equipment is required, the observer shall be provided with and be required to use such clothing and equipment and shall comply with all other applicable safety and health procedures.

X-3.0 FINAL AIR CLEARANCES:

X-3.1 Background *(NOTE)*: All final air samples shall be taken by the **SED Inspectors** (as defined in Section 4.2, Director Of Engineering, Inspector guidance). Additionally, authorization to remove containments can only be given by the **AOC Asbestos Management Coordinator**, after sample results are received. The following information is provided to explain these sampling procedures.

X-3.2 Direction: The guidance offered here addresses the question of how to determine when an asbestos abatement worksite has been sufficiently cleaned. It is set within the larger framework of determining when the abatement work is completed, but it focusses specifically on the use of air sampling and analysis to determine work-site cleanliness. Procedures for conducting post- abatement air sampling are specified and methods for measuring airborne asbestos and interpreting the results are recommended.

H-3.3 Summaries. Following are summaries of each major topic, preceded by a brief discussion of the process for clearing the containment. The major topics include analyzing air samples for asbestos, air sampling procedures, criteria for determining work-site cleanliness and quality assurance practices. The process for clearing the containment is as follows:

H-3.3.1 The most recent EPA guidance on controlling ACM in buildings describes a two-part process for determining when an abatement project is complete. The two steps are: (1) a visual test to determine if the ACM has been properly abated and if the work site is free of debris and dust, and (2) an air test to determine if residual asbestos fibers generated during abatement have been reduced below a predetermined level, that is, to determine if the air-test release criterion has been met. The **AOC Asbestos Management Coordinator** or the person appointed to monitor the abatement work shall be responsible for conducting the visual test, the final air test and/or overseeing the final air test.

H-3.3.2 The visual test is designed, first, to spot any incomplete abatement work. If the ACM is surfacing material, abatement could mean removal, encapsulation, or enclosure. If the

ACM is pipe or boiler insulation, abatement could mean removal, patching, or replacement of the protective jacket. In any case, the quality and thoroughness of the work is reviewed. Deficiencies shall be corrected before proceeding with the next phase of the inspection.

H-3.3.3 The second role of the visual inspection is to detect obvious signs of inadequate work-site cleaning. The abatement crew shall clean all plastic barriers at the work site using wet cleaning or HEPA vacuuming techniques. The **SED Inspector** shall use damp cloths and a flashlight to check for debris and dust.

H-3.3.4 The air test is designed to detect asbestos fibers which were not removed by the cleaning procedures. Before the test is conducted, all plastic barriers are removed except those covering vents, windows, doors, and all entries to the work site (these are the critical barriers). This will allow any fibers trapped between the plastic and floors, walls, and/or ceilings to become airborne before testing is begun. If the air test criterion is met, the containment is cleared and can be removed. Otherwise, the work site must be thoroughly recleaned.

H-3.4 Analyzing Air Samples For Asbestos; For Containment Clearance: See earlier discussion in Paragraph X-1.2.

H-3.5 Analyzing Air Samples For Asbestos For Containment Clearance; Recommendations: See earlier discussion in Paragraph X-1.3.

H-3.6 Clearance Air Sampling Procedures: See earlier discussion in Paragraph X-1.4.

H-3.7 Clearance Air Sampling Procedures; Recommendations:

H-3.7.1 See earlier discussion in Paragraph X-1.5.

H-3.7.2 In addition, sample aggressively using forced-air equipment such as a leaf blower to dislodge fibers from surfaces.

H-3.8 Air Testing Criteria For Determining Work-site Cleanliness After Abatement:

H-3.8.1 Regardless of which method is used to analyze air samples for asbestos, the results of the analyses can only be used for clearing a containment if a criterion is available against which the results can be compared. In other words, how low do the measured asbestos levels have to be in order for the work site to be declared sufficiently clean?

H-3.8.2 Since an abatement activity could not be expected to reduce asbestos levels below those in the air entering the work site, the level of airborne asbestos in the ambient air (or in the make-up air if negative pressure ventilation is used at the work site appears to be a reasonable reference. This is the case for TEM. PCM, however, is not sufficiently sensitive to thin fibers nor specific for asbestos to reliably measure asbestos outside the abatement work site. A criterion based on the limit of reliable quantification of the analytical method is more appropriate for PCM.

H-3.9 Number of Samples: See earlier discussion in Paragraph X-1.6.

H-3.10 Number of Samples; Recommendations:

H-3.10.1 For TEM's, see earlier discussion, Paragraph X-1.7.

H-3.10.2 In addition, the containment is cleared if the inside level is not statistically higher than the outside level (70 s/mm^2 or less is required to clear the containment); otherwise, have the entire work site recleaned and retested.

H-3.10.3 For PCM's, see earlier discussion, Paragraph X-1.7.

H-3.10.4 In addition, the containment is cleared if none of the samples are above the PCM limit of reliable quantification (0.01 f/cc); otherwise, have the entire work site recleaned and

retested.

H-3.11 Quality Assurance Practices: See earlier discussion, Paragraph H-3.8.

H-3.12 Quality Assurance Practices: Recommendations: See earlier discussion, Paragraph H-3.9.

H-4.0 BULK SAMPLING:

H-4.1 For PLM or TEM methods:

H-4.1.1 Friable material.

H-4.1.2 The individual performing the sampling shall wear at least a half-face respirator with disposable filters.

H-4.1.3 Wet the surface of the material to be sampled with amended water mist from a spray bottle.

H-4.1.4 Use a reusable sampler such as a cork borer to obtain sample.

H-4.1.5 With a twisting motion, slowly push the sampler into the material. Be sure to penetrate all layers of the material sampled.

H-4.1.6 Extract the sampler, then eject the material inside the sampler into a sample container such as a 6 mil poly zip-lock bag and secure the bag with tape.

H-4.1.7 Wet wipe the tube and plunger of the sampler with a wet towel. Place the wet towel into a plastic asbestos disposal bag.

H-4.1.8 Clean any visible debris from the sample with wet towels. Also place these towels into a plastic asbestos disposal bag.

H-4.1.9 Use bridging encapsulate (44-20 or equivalent) to cover the spot where the sample was taken.

H-4.1.10 Label the container and the sample location with a unique sample identification number.

H-4.2 Non-Friable Material and Floor Tile:

H-4.2.1 The individual performing the sampling shall wear at least a half-face respirator with disposable filters.

H-4.2.2 Wet the surface of the material to be sampled with amended water mist from a spray bottle.

H-4.2.3 Break off apiece of the non-friable material and place the sample inside a sample container such as a 6 mil poly zip-lock bag and secure the bag with tape.

H-4.2.4 Wet wipe the sampled area with a wet towel. Place the wet towel into a plastic asbestos disposal bag.

H-4.2.5 Label the container and the sample location with a unique sample identification number.

APPENDIX Y ----
ELECTRONIC FORMS

SEE THE NEXT PAGES FOR THE ACTUAL

"NOTIFICATION OF DEMOLITION AND RENOVATION"

FORMS;

ELECTRONICALLY AVAILABLE ON

AoCNET's L DRIVE or I DRIVE AS

"SAFETY\UAMP\NESHAP_2.FRM" (in WP5.1).

NOTIFICATION OF DEMOLITION AND RENOVATION

Operator Proj. #	Postmark	Date Received	Notification #

I. TITLE OF NOTIFICATION (O-Original; R-Revised; C-Cancelled):

II. FACILITY INFORMATION (Identify owner, removal contractor, and other operator):

OWNER NAME:			
Address:			
City:		State:	Zip:
Contact:			Tel:
REMOVAL CONTRACTOR:			
Address:			
City:		State:	Zip:
Contact:			Tel:
OTHER OPERATOR:			
Address:			
City:		State:	Zip:
Contact:			Tel:

III. TYPE OF OPERATION (D-Demo; O-Ordered Demo; R-Renovation; E-Emergency Renovation):

IV. IS ASBESTOS PRESENT? (Yes/No):

V. FACILITY DESCRIPTION (Include building name, number and floor or room number):

Bldg. Name:			
Address:			
City:		State:	County:
Site Location:			
Building Size:	# of Floors:		Age in Years:
Present Use:		Prior Use:	

VI. PROCEDURE, INCLUDING ANALYTICAL METHOD, IF APPROPRIATE, USED TO DETECT THE PRESENCE OF ASBESTOS MATERIAL:

VII. APPROPRIATE AMOUNT OF ASBESTOS, INCLUDING: 1. Regulated ACM To Be Removed 2. Category I ACM Not Removed 3. Category II ACM Not Removed		RACM To Be Removed	Nonfriable Asbestos Material Not To Be Removed		Indicate Unit of Measurement Below	
			CAT I	CAT II	UNIT	
Pipes					Ln Ft	Ln m
Surface Area					Sq Ft	Sq m
Vol. RACM Off Facility Component					Cu Ft	Cu m

VIII. SCHEDULED DATES ASBESTOS REMOVAL (MM/DD/YY)

Start: Complete:

IX. SCHEDULED DATES DEMO/RENOVATION (MM/DD/YY)

Start: Complete:

NOTIFICATION OF DEMOLITION AND RENOVATION (continued)

DESCRIPTION OF PLANNED DEMOLITION OR RENOVATION WORK, AND METHOD(S) TO BE USED:

XI. DESCRIPTION OF WORK PRACTICES AND ENGINEERING CONTROLS TO BE USED TO PREVENT EMISSIONS OF ASBESTOS AT THE DEMOLITION AND RENOVATION SITE:

XII. WASTE TRANSPORTER #1:

Name:

Address:

City: | State: | Zip:

Contact Person: | Tel:

WASTE TRANSPORTER #2: (if applicable)

Name:

Address:

City: | State: | Zip:

Contact Person: | Tel:

XIII. WASTE DISPOSAL SITE:

Name:

Address:

City: | State: | Zip:

Contact: | Tel:

XIV. IF DEMOLITION ORDERED BY A GOVERNMENT AGENCY, PLEASE IDENTIFY THE AGENCY BELOW:

Name: | Title:

Authority:

Date of Order (MM/DD/YY): | Date Ordered to Begin (MM/DD/YY):

XV. FOR EMERGENCY RENOVATIONS:

Date and Hour of Emergency (DD/MM/YY):

Description of the Sudden, Unexpected Event:

Explanation of how the event caused unsafe conditions or would cause equipment damage or an unreasonable financial burden:

XVI. DESCRIPTION OF PROCEDURES TO BE FOLLOWED IN THE EVENT THAT UNEXPECTED ASBESTOS IS FOUND OR PREVIOUSLY NONFRIABLE ASBESTOS MATERIAL BECOMES CRUMBLED, PULVERIZED, OR REDUCED TO POWDER:

XVII. I CERTIFY THAT AN INDIVIDUAL TRAINED IN THE PROVISIONS OF THIS REGULATION (40 CFR, Part 61, SUBPART M) WILL BE ON-SITE DURING THE DEMOLITION OR RENOVATION AND EVIDENCE THAT THE REQUIRED TRAINING HAS BEEN ACCOMPLISHED BY THIS PERSON WILL BE AVAILABLE FOR INSPECTION DURING NORMAL BUSINESS HOURS (Required 1 year after promulgation).

(Date) _____ (Signature of Owner/Operator) _____

XVIII. I CERTIFY THAT THE ABOVE INFORMATION IS CORRECT.

(Date) _____ (Signature of Owner/Operator) _____

APPENDIX Z ----
DEFINITIONS & ABBREVIATIONS

Acoustical Plaster: Sound absorbing, finishing material, mill-formulated for application in areas where a reduction in sound reverberation or noise intensity is desired. These materials usually are applied in a minimum thickness of 1/2" (13 mm). The finish material is applied over gyps plaster, plaster brown coat or other base plaster. The surface material is usually friable and has a rough surface appearance.

Acoustic Tile: Tile-shaped blocks of sound absorbent material used for ceilings or as wall facing. May be glued to substrate or placed in a rigid grid work.

Adequately Wet: Sufficiently mixed or penetrated with liquid to prevent the release of particulates.

Aggressive Method: Removal or disturbance of building material by sanding, abrading, grinding or other method that breaks, crumbles, or disintegrates intact ACM.

Air Monitoring: The process of measuring the fiber content of a specific vole of air.

Amended Water: Water to which surfactant (wetting agent) has been added to increase the ability of the liquid to penetrate ACM.

AOC Asbestos Management Coordinator: A designated representative of the Architect of the Capitol who has the knowledge, training, experience and understanding to ensure that the AOC UAMP is properly implemented in all facilities under the AOC's jurisdiction.

Architect of the Capitol (AOC): Means both the agency known as the Office of the Architect of the Capitol and the individual serving as the agency head. In this document, when the acronym AOC is used, it refers to the agency.

Area Decontamination: The cleaning of all visible asbestos debris and the performance of air sampling to determine if clearance levels have been met.

Area Air Sampling: Ambient air sampling performed in an area containing thermal system insulation (TSI) ACM or surfacing ACM to determine airborne asbestos fiber levels.

Asbestos: Chrysotile, amosite, crocidolite, tremolite asbestos, anthophyllite asbestos, actinolite asbestos, and any of these minerals that have been chemically treated and/or altered.

Asbestos-Containing Building Material (ACBM): Any building material containing more than one percent asbestos.

Asbestos-Containing Material (ACM): Any material containing more than one percent asbestos.

Asbestos-Containing Waste: Mill tailings or any waste that contains commercial asbestos and is generated by a source regulated under NESHAP. This term includes filters from control devices, friable asbestos waste material, and bags or other similar packaging contaminated with commercial asbestos. As applied to demolition and renovation operations, this term also includes regulated asbestos-containing waste and materials contaminated with asbestos including disposable equipment and clothing.

Asbestos Debris: Pieces of ACM that can be identified by color, texture, or composition; also refers to dust if the dust is determined to be ACM by an accredited inspector.

Asbestos Hazard Emergency Response Act (AHERA): Legislation which required the U.S. EPA to promulgate regulations covering asbestos-containing materials in schools.

Authorized Person: Any person authorized by the employer and required by work duties to be present in areas regulated under this program.

Breathing Zone: A hemisphere forward of the shoulders with a radius of approximately 6" to 9" (150-230 mm).

Bridging encapsulant: An encapsulant that forms a discrete layer on the surface of an in situ asbestos matrix to prevent a release of fibers.

Class I Asbestos Work: Activities involving the removal of Thermal System Insulation (TSI) and surfacing ACM and PACM.

Class II Asbestos Work: Activities involving the removal of ACM which is not TSI or surfacing material. This includes, but is not limited to, the removal of asbestos-containing wallboard, floor tile and sheeting, roofing and siding shingles, and construction mastics.

Class III Asbestos Work: Activities involving the repair and maintenance operations, where ACM, including TSI and surfacing material, is likely to be disturbed. This work includes the taking of bulk samples.

Class IV Asbestos Work: Maintenance and custodial activities during which employees contact ACM and PACM and activities to clean up waste and debris containing ACM and PACM.

Clean Room: An uncontaminated room having facilities for the storage of employees' street clothing and uncontaminated materials and equipment.

"Closely resemble": Means that the major workplace conditions which have contributed to the levels of historic asbestos exposure, are no more protective than conditions of the current workplace.

Competent Person: In addition to the definition in 29 CFR 1926.32 (f), a person who is capable of identifying existing asbestos hazards in the workplace and selecting the appropriate control strategy for asbestos exposure, and who has the authority to take prompt corrective measures to eliminate them.

Concealed Suspension/Concealed Spline Ceiling System: A monolithic ceiling surface, unobstructed by the cross-hatching of exposed grid members. Tiles are typically 12" x 12" (305 x 305 mm) or 12" x 24" (305 x 610 mm) with slots or kerfs cut into the edges of tiles for the purposes of accepting flat or "T" splines to support the tiles.

Confined Space: A space that has limited openings for entry and exit, unfavorable natural ventilation and/or a space not designed for continuous worker occupancy. Examples include boilers, furnaces, manholes, and utility vaults.

Contaminated Area:

(a) An area which requires cleaning when PCM levels are greater than 0.01 f/cc, or if TEM levels are greater than 70 s/mm^2, and the TSI ACM or surfacing ACM has been disturbed, or

(b) If no disturbance of TSI ACM or surfacing ACM is observed, and PCM levels are greater than 0.01 f/cc or if TEM levels are greater than 70 s/mm^2, an investigation shall be performed to ascertain reasons for the elevated readings.

Critical Barrier: One or more layers of polyethylene taped in place over openings into a work area sufficient to prevent airborne asbestos in a work area from migrating to an adjacent area. Openings to be covered include doors, windows, diffusers and any other opening that could allow outside air into a work area.

Decontamination area: An enclosed area adjacent and connected to the regulated area and consisting of an equipment room, shower area, and clean room, which is used for the decontamination of workers, materials and equipment that are contaminated with asbestos.

Decorative Acoustic Finish: Finishing material mill-formulated and spray applied up to about 3/8" (10 mm) thick over gyps wallboard. Material has a rough surface and is similar in appearance to acoustic plaster but is not designed for sound absorption.

Delamination: Separation of one layer from another.

Demolition: The wrecking or taking out of any load-supporting structural member and any related razing, removing, or stripping of asbestos products.

Disposal Bag: Properly labeled 6 mil (0.15 mm) thick (or thicker) leak-tight plastic bags used for transporting asbestos waste from work area to disposal site.

Disturbance: Contact which releases fibers from ACM or PACM or debris containing ACM or PACM. This term includes activities that disrupt the matrix of ACM or PACM, render ACM or PACM friable, or generate visible debris. Disturbance includes cutting away small amounts of ACM and PACM, no greater than the amount which can be contained in one standard sized glove bag or waste bag in order to access a building component. In no event shall the amount of ACM or PACM so disturbed exceed that which can be contained in one glove bag or waste bag which shall not exceed 60 inches in length and width.

Drop Cloth: A layer of polyethylene on the floor of a work area to protect the floor below from contamination and to facilitate the clean-up of dust or debris generated during the work.

Employee Exposure: Exposure to airborne asbestos that would occur if the employee were not using respiratory protective equipment.

Encapsulant: A material that surrounds or embeds asbestos fibers in an adhesive matrix to prevent release of fibers.

Enclosure: An air-tight, impermeable, permanent barrier constructed around ACM to control the release of asbestos fibers into the air.

EPA: U.S. Environmental Protection Agency.

Equipment room (change room): A contaminated room located within the decontamination area that is supplied with impermeable bags or containers for the disposal of contaminated protective clothing and equipment.

Excursion Limit (EL): A maxim airborne concentration of asbestos measured in fibers per cubic centimeter (f/cc) as averaged over a sampling period of thirty minutes. Currently, the 30 minute excursion limit is 1 f/cc.

Fiber: A particulate form of asbestos, 5 micrometers or longer, with a length-to-diameter ratio of at least 3 to 1.

Fiber Release: Any uncontrolled or unintentional disturbance of ACBM or ACM, resulting in visible emissions.

Final Air Clearance: Air monitoring designed to determine whether the work area has been cleaned adequately.

Final Air Clearance Using PCM: To meet EPA's recommended release criteria following an asbestos abatement action, all measured work site levels must be less than 0.01 f/cc of air as determined by sample analysis using the NIOSH 7400 method for phase contrast microscopy (PCM).

Final Air Clearance Using TEM:

(a) The average of measured work site asbestos levels are not statistically larger than the average of asbestos levels outside the work site.

(b) If TEM sampling is used to clear an asbestos abatement work site, it is the policy of the AOC that the AHERA guidelines for conducting TEM clearances to determine completion of an asbestos project be used, with a minimum air volume of 1,200 liters per sample. A TEM clearance test requires a minimum of five samples inside the work site plus one field blank, five samples outside the work site plus one filed blank and one box blank for a minimum total of 13 samples per work site.

(c) Additional samples are necessary if large or complex work sites that consist of several rooms or distinct areas exist.

(d) Provided the minimum requirements are met, it is not necessary to have an equal number of samples inside and outside the work site.

(e) The average of all "inside the work site" samples must be less than 70 asbestos structures per millimeter squared.

Fireproofing: Material applied to structural elements or systems which provides increased fire resistance, usually serving no structural function. This material is typically applied using spray equipment.

Friable ACM: ACM that, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure.

Friable Asbestos: (See Regulated ACM).

Glove bag: A polyethylene or polyvinyl chloride bag-like enclosure with glove-like appendages through which material and tools may be handled. In use, a glove bag is affixed around an asbestos-containing source (most often TSI) so that the material may be removed while minimizing release of airborne fibers to the surrounding atmosphere.

High-Efficiency Particulate Air (HEPA) Filter: A filter capable of trapping and retaining at least 99.97 percent of all mono-dispersed particles of 0.3 microns in diameter or larger.

Homogeneous area: An area of surfacing material or thermal system insulation that is uniform in color and texture.

Intact ACM: ACM which has not crumbled, been pulverized, or otherwise deteriorated so that it is no longer likely to be bound with its matrix.

Jurisdiction Asbestos Management Coordinator: A designated representative who, with guidance from the AOC Asbestos Management Coordinator, supervises all aspects of their appropriation's asbestos management program within that appropriations's facilities.

Medical Surveillance: A periodic comprehensive review of a worker's health status. The required elements of an acceptable medical surveillance program are listed in the Occupational Safety and Health Administration standards for asbestos (29 CFR 1926.1101 (m) (2) (ii).

Modification: For purposes of 29 CFR 1926.1101, paragraph (g)(6)(ii) means a changed or altered procedure, material or component of a control system, which replaces a procedure, material or component of a required system. Omitting a procedure or component, or reducing or diminishing the stringency or strength of a material or component of the control system is not a "modification" for the purposes of 29 CFR 1926.1101 (g)(6)(ii).

Negative Initial Exposure Assessment: A demonstration by the employer, which complies with the criteria in 29 CFR 1926.1101 (f)(2)(iii) that employee exposure during an operation is expected to be consistently below the Permissible Exposure Limit (PEL).

Negative Pressure Enclosure System: A local exhaust system intended to prevent the escape of contaminated air to the surrounding environment that complies with 29 CFR 1926.1101 (g)(5)(i). It utilizes HEPA filtration capable of maintaining a minimum water pressure differential of - 0.02 column inches inside the work area relative to outside the work area pressure. This system recirculates clean air and/or generates a constant flow of clean air from adjacent areas into the work area.

Negative Pressure Respirator: A respirator in which the air pressure inside the respiratory-inlet covering is positive during exhalation and negative during inhalation in relation to the air pressure of the outside atmosphere.

NESHAP: National Emission Standards for Hazardous Air Pollutants promulgated by EPA under the Clean Air Act. One of these standards (40 CFR 61, Subpart M) regulates asbestos emissions.

NIOSH: National Institute for Occupational Safety and Health, which was established by the Occupational Safety and Health Act of 1970. The primary functions of NIOSH are to conduct research, issue technical information and certify respirators.

Occupied Area: An area where personnel are present and are performing their normal activities intended for the area (such as in a typical office area from 8:00 to 5:00 p.m., Monday through Friday).

Operations & Maintenance Activities (O&M): The cleaning, maintenance, repair or renovation of ACM where the intent of the activity is not to remove asbestos.

Operations & Maintenance (O&M) Program: A program of work practices to maintain ACM in good condition, ensure clean up of asbestos fibers previously released and prevent further release by minimizing and controlling ACM disturbance or damage.

OSHA: Occupational Health & Safety Administration (or Act).

Penetrating Encapsulant: An encapsulant that is absorbed by the in situ asbestos matrix without leaving a discrete surface layer.

Personal Air Sample: An air sample taken with a sampling pp directly attached to the worker with the collecting filter and cassette placed in the worker's breathing zone.

Permissible Exposure Limit (PEL): The maxim permitted airborne concentration of asbestos measured in f/cc as averaged over an 8 hour time weighted period. Currently, the OSHA PEL for asbestos is 0.1 f/cc TWA.

Phase Contrast Microscopy (PCM): A method of analysis employing a light microscope that is used to find the concentration of airborne fibers. PCM does not distinguish between asbestos and other fibers.

(a) This method is required by OSHA to determine personal exposures to asbestos; if another barrier or isolation method other than critical barriers as outlined in 29 CFR 1926.1101 (g) (4) (ii) (B) are used to cover all openings to the regulated area; which prevents the migration of airborne asbestos from the regulated area, shall be verified by perimeter area surveillance during each work shift at each boundary of the regulated area. This perimeter area air monitoring shall show that clearance levels contained in 40 CFR Part 763, Subpart E, of the EPA asbestos in schools rule are met; and

(b) This method is used by the EPA to clear asbestos abatement projects.

Plenum: Any space used to convey air in a building or structure, such as the space above a suspended ceiling.

Polarized Light Microscopy (PLM): A method of analysis using a light microscope to determine the type and concentration of asbestos in bulk materials.

Presumed Asbestos-Containing Material (PACM): Thermal System Insulation (TSI) and surfacing material found in buildings constructed no later than 1980, which is considered to be ACM unless it is otherwise determined. The designation of a material as PACM may be rebutted pursuant to 29 CFR 1926.1101, paragraph (k) (4).

Protection Factor: The ratio of the ambient concentration of an airborne substance to the concentration of the substance inside the respirator at the breathing zone of the wearer. The protection factor is a measure of the degree of protection provided by a respirator to the wearer.

Project Designer: A person who has successfully completed the training requirements for an abatement project designer established by 40 CFR 763.90(g), EPA's Model Accreditation Plan.

Regulated ACM (RACM): As defined by NESHAP in the November 20, 1990 Federal Register, regulated asbestos-containing material (RACM) means:

(a) Friable asbestos material,

(b) Category I nonfriable ACM that has become friable,

(c) Category I nonfriable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading, or

(d) Category II nonfriable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations regulated by this subpart.

--- Note: Regulated ACM is an EPA NESHAP concept. OSHA makes no distinction between friable and non-friable asbestos. "Cutting" means to penetrate with a sharp-edged instrument and includes sawing, but does not include shearing, slicing or punching. "Grinding" means to reduce powder or small fragments and includes mechanical clipping or drilling.

--- Note also: Friable asbestos material means any material containing more than 1 percent asbestos as determined using the method specified under AHERA (40 CFR Part 763, Sub-part F, Appendix A , section 1, Polarized Light Microscopy) that, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure. If the asbestos content is less than 10 percent as determined by a method other than point counting by polarized light microscopy (PLM), verify the asbestos content by point counting using PLM.

(e) Category I nonfriable asbestos-containing material (ACM): means asbestos-containing packings, gaskets, resilient floor covering and asphalt roofing products containing more than 1 percent asbestos as determined using the method specified under AHERA.

(f) Category II nonfriable ACM: means any material, excluding Category I nonfriable ACM, containing more than 1 percent asbestos as determined using the methods specified under AHERA, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

Regulated Area: An area established by the employer to demarcate where Class I, II and III asbestos work is conducted, and any adjoining area where debris and waste from such asbestos work accumulate; and a work area within which airborne concentrations of asbestos exceed or there is a reasonable possibility they may exceed the permissible exposure limit (PEL).

Removal: All operations where ACM and/or PACM is taken out or stripped from structures or substrates and includes demolition operations.

Removal Encapsulant: A penetrating encapsulant specifically designed to minimize fiber release during removal of asbestos-containing materials rather than for in situ encapsulation.

Renovation: The modifying of any existing structure, or portion thereof.

Repair:
(a) The overhauling, rebuilding, reconstructing, or reconditioning of structures or substrates, including encapsulation or other repair of ACM or PACM that is attached to structures or substrates.
(b) The returning of damaged ACBM to an undamaged condition or to an intact state so as to prevent fiber release.

Respirator: A device designed to protect the wearer from the inhalation of harmful particulates.

Surfacing ACM: Asbestos-containing material that is sprayed-on, troweled-on or otherwise applied to surfaces. Examples include acoustical plaster on ceilings and fireproofing materials on a structural member.

Surfactant: A chemical wetting agent added to water to improve penetration, thus reducing the quantity of water required for a given operation or area.

Suspended T-Bar Ceiling System: A false or dropped ceiling composed of acoustic tiles laid into an inverted metal T-bar grid frame suspended by wires from building framing members.

Temporary Barrier: One or more layers of 6 mil polyethylene installed to isolate a work area from other portions of a facility.

Thermal System Insulation (TSI) ACM: Asbestos-containing material that is applied to pipes, fittings, boilers, breaching, tanks, ducts or other interior structural components to prevent heat loss or gain or water condensation.

Time Weighted Average (TWA): In air sampling, the average air concentration of contaminants during a particular time period.

Transmission Electron Microscopy (TEM): A method of analysis employing an electron microscope that is used to determine the concentration of airborne or bulk asbestos fibers and structures. TEM distinguishes between asbestos and other materials and can detect asbestos fibers smaller than those found by PCM.

Uniform Asbestos Management Program (UAMP): An approved AOC program that outlines the responsibilities, regulatory requirements and procedures to be followed in managing asbestos-containing materials in facilities under the jurisdiction of the AOC.

Work Area:
(a) An area where asbestos-related work or removal operations are performed, and
(b) which is designed and/or isolated to prevent the spread of asbestos dust, fibers or debris; and entry by unauthorized personnel.

Work Practices: Procedures designed to be followed to avoid or minimize fiber release during activities affecting ACM.